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BALTIMORE, APRIL 12, 1895.

An Opportunity for the South.

It was announced some five or six weeks ago that the Special Cotton Mill Edition of the MANUFACTURERS' RECORD would be sent to every director of every New England mill. In order, however, to make a still broader scope for this number, it has been decided to send a copy to many of the leading cotton mills of Great Britain. This will be an entirely new field in which to push the industrial possibilities of the South. There is no reason, however, why the cotton manufacturers of England, who are already feeling the effect of competition, should not be just as ready to turn their attention to the South as a field for cotton mills as the people of New England are already so largely doing. As bearing on this subject, the Textile Mercury, one of the leading textile journals of Great Britain, takes rather a gloomy view of the future of cotton manufacturing in that country. In a recent issue it says:

It is high time the English cotton spinner and manufacturer should look out for suitable fields to which he may emigrate, for it seems to be daily becoming more evident that his day is over in this country.

Stick to Southern Stock.

The way in which the development of the South is attracting the attention of specialists in investment securities is shown by an extract from a recent circular of Watson & Gibson, the New York bankers and investment agents. It reads as follows:

The South is certainly attracting the attention of immigrants rather than the Northwest. Low prices of cotton may be as bad as low prices of wheat, but the South has a greater variety of resources than the Northwest and less blizzards. Officials of the Queen & Crescent Route are quoted as saying that they have had more Northern inquiry about Southern homes and industries in 1894 than in the thirteen preceding years. Even many Scandinavians are now giving up the Northwest for the South. The marked movement among Eastern cotton mills towards Southern sites, with the advantages of longer hours, smaller pay, cheaper raw cotton, cheaper coal, etc., must encourage all owners of Southern properties. The railroads of the South have suffered less than those of any other section; indeed, they mostly show gains.

Some Odd Railroad Propositions.

The Knoxville papers are giving very great attention to a projected railroad from Knoxville to Port Royal. Col. A. E. Boone, of Ohio, has succeeded in arousing sufficient interest to induce them to devote columns of space to the matter. A public meeting was held at Knoxville last Wednesday, composed of delegates from several points in Tennessee and South Carolina, to encourage the undertaking.

The MANUFACTURERS' RECORD believes that there is great need for a railroad from Knoxville to Port Royal; it believes that a well-constructed line reaching from the Jellico coal region to Knoxville and on to Port Royal would open up a magnificent country of vast freight-creating possibilities; but the scheme as outlined at the Knoxville meeting appears on its face to be a very visionary one. It was suggested in Colonel Boone's speech that the entire line should be double track, which in itself is entirely unnecessary, as it would be impossible for some years to develop sufficient business to justify so large an outlay at the start. He also suggested that the road should be thrown open to all railroad transportation companies as a toll road. This is not feasible. He also suggested that a company should be organized in each State, and that the same president should be chosen for all of them, which, to that extent, may be correct, but to this he adds that the president's wishes as to all officials, excepting that of treasurer and auditor, must be unqualifiedly ratified by the board of directors. He proposes that traffic-agreement contracts shall be secured from those now controlling the land through which the road would run, to be in the shape of a covenant binding the land when developed to give to the road the hauling of at least one-half of all the products taken from the property for shipment to market, these contracts to be binding for 100 years to come.

It is difficult to conceive of a more utterly absurd proposition than this. The man who binds his property upon such a basis, guaranteeing to give to this road one-half of all the products from it, whether mineral, timber or agricultural, for shipment for a century to come, would at once almost destroy the value of his property, and it is hard to conceive of such a suggestion having been made in the shape of a formal proposition to people of average intelligence.

In order to carry out the project, Mr. Boone suggested that it would be necessary to raise a promoting fund of at least \$200,000 to be furnished by each State in proportion to the value of the road to them, this value to be fixed by Mr. Boone; and he decides

that South Carolina must contribute \$85,000, Georgia \$10,000, North Carolina \$25,000, Tennessee \$65,000 and Kentucky \$15,000 of this proposed \$200,000 fund. In order to insure the subscribers against loss, Mr. Boone proposes to personally guarantee out of the first profits of construction the return of the money with interest, but he fails to give any adequate assurance that either his personal guarantee or the prospective profits of construction are sufficient to justify the putting up of \$200,000 in such a scheme as this.

The MANUFACTURERS' RECORD has no acquaintance whatever with Mr. Boone. It is heartily in favor of seeing a road from Jellico to Port Royal constructed, but if the people of Knoxville and the towns through which this road is expected to pass accept Mr. Boone's propositions, we can only say that he must be a very persuasive man, indeed.

A Sign of Southern Growth.

An interesting indication of the rapid increase in Southern centres of population is found in the number of new post-offices established in this section. According to government statistics, as given in the United States Official Postal Guide, the number of post-offices in 1890 was 62,037, and in 1894 69,007, an increase of 6970. Of this increase the South is credited with 4496, and all the other States with 2474. Of the increase the South has 65 per cent. and the North 35 per cent.

The increase by States is shown in the following table:

States.	1890.	1894.
Alabama.....	1893	2208
Arkansas.....	1477	1685
Florida.....	535	1012
Georgia.....	1878	2309
Kentucky.....	2214	2623
Louisiana.....	846	1005
Maryland.....	1051	1194
Mississippi.....	1278	1550
Missouri.....	2389	2795
North Carolina.....	2511	2913
South Carolina.....	1096	1309
Tennessee.....	2273	2639
Texas.....	2248	2687
Virginia.....	2706	3122
West Virginia.....	1577	1816

These figures only repeat the proof that the South is not only keeping abreast of the rest of the States, but is leading them in gain of population and in the development of communities. It is the same story that is told by bank clearings of increased business, by railroad earnings, of traffic improvement, and by the summary of new enterprises which the MANUFACTURERS' RECORD makes public from week to week—a steady and prosperous growth in people, commerce and industries.

Tennessee Coal.

A director of the Tennessee Coal, Iron & Railroad Co. claims that the company can make iron at less than \$6 a ton, and that it is getting a profit on all the iron and coal it sells.

The New England Cotton Manufacturers' Visit South.

The recent visit of a few of the foremost cotton manufacturers of New England to the South is a matter of more than ordinary interest. These gentlemen, representing some of the oldest, largest and most prosperous cotton-manufacturing companies of the North, went South purely on a business trip in order to make a careful personal investigation of the general conditions surrounding the manufacture of cotton. They were not there in any official capacity, nor were they in any way whatever connected with the discussion of labor questions, which resulted in the recent visit of the Massachusetts legislative committee. In fact, the plans for this trip were matured long before the legislative committee had thought of going South. These gentlemen had in view the study of the South's general advantages rather than those of specific localities. They wanted to see for themselves the character of help employed in Southern mills, all the conditions surrounding labor and everything else that would enable them to form an accurate judgment as to the wisdom of New England people making large investments in Southern cotton mills. It is gratifying to be able to say that, after a careful investigation of many mills in the Carolinas and Georgia, every member of the New England party was greatly impressed with the operatives in Southern mills. They freely admitted that they were more than pleased with finding that Southern mill operatives were, as a general thing, so bright, quick and intelligent, and also that all of the mills had the appearance of comfort and convenience for the operatives.

A half century ago New England mills had native American help, many of the operatives being from the families of farmers. With the growth of the towns and cities and the increase in employment, American help gradually turned to other work, and it became necessary to fall back upon foreigners as mill operatives. The majority of the operatives in New England mills at present are French Canadians. To say that New England mill help is better than Southern would simply be to say that the lower classes of foreigners are more intelligent and more quick-witted than the native American. One prominent New England gentleman (not of this party, however,) recently expressed it by saying that, having passed through the war as an officer, and realizing the ability, the energy and the courage of the Southern soldier, and especially of thousands from the mountain districts of the South with whom he especially had to deal, he had always been convinced that their children must be of more than average ability, and he was satisfied that they would

prove, when put to the test, to be the very best possible operatives in manufacturing enterprises.

As already stated, this trip was not with a view to selecting any particular locality for cotton mills, but was merely designed as a general tour of investigation. It was intended that if the results of these investigations proved entirely satisfactory, that then the men who want to build mills would have expert investigations made as to the most desirable sites.

The MANUFACTURERS' RECORD believes that the result of this trip will prove of very great value to the South. It has given some of the leading men of New England a clearer insight into the South and its business conditions than they have ever had before. What they think of the South and of its advantages and attractions will naturally for some weeks to come form the subject of innumerable private discussions as well as of newspaper talk throughout New England.

A Warning to the South.

The condition of manufacturing and business in the South has reached a point where the most conservative observer of this section is compelled to acknowledge that the improvement which began over a year ago is permanent. While some of the most eminent authorities on this point gave opinions in detail in the last issue of the MANUFACTURERS' RECORD, such facts as the orders being received by manufacturers, the increase of capital being invested in new industries, the increase in the number of banking and commercial establishments, the influx of settlers from the North and West, and the gradual but steady change for the better among the farmers, are equally as good proof of renewed prosperity.

At the present time the flourishing cotton factories are perhaps attracting the greatest attention. The healthy condition of this industry, while known for years past to many, has only of late commanded the full attention of the North, and today there are thousands of people in the North who believe that about all the manufacturing done in the South is that of coarse-cotton goods, and to read the daily newspapers one would never know that any other branch of industry had a foothold in these States, except, perhaps, in the Birmingham iron region.

The truth is that cotton-goods production is only one of many classes of manufacturing being successfully conducted and yielding those who have invested their money a substantial profit. The strongest verification of this statement is the fact that so many capitalists who have a national reputation for shrewdness and caution, and who have accumulated millions by their own efforts, have put their money in liberal amounts in Southern industries aside from cotton manufacturing. Many other profitable ventures in the South would, perhaps, advertise it as much as the cotton-mill additions and cotton mill dividends, but they have not become as yet "noised about" through such legislative action and other agitation as has been given them in New England. The low cost of producing iron in Alabama, Tennessee and other States, the value of cotton products, such as cotton oil and cottonseed meal, the profit from meat,

diversified agriculture, etc., are a few subjects which are just beginning to receive recognition throughout the country.

The people of the South are not slow to appreciate the fact that "times are mending." Naturally they desire the "mending" to be done as soon as possible, and right here they are liable to mix evil with good. There is such a thing as trying to hasten the prosperity by holding out false inducements to prospectors, by exaggerating advantages of this or that section and by allowing unscrupulous speculators to organize promotion companies to sell lands or to invest capital in other ventures not worth 10 per cent. of the money paid in. After the bitter experience which the Southern people have suffered in this way, it would seem hardly necessary to caution them about boom schemes, but we regret to note indications here and there in the South of the speculative spirit, which, unless watched, may do much harm.

The MANUFACTURERS' RECORD cannot warn its readers too strongly to "make haste slowly" in promoting the advantages of their section.

Because the cotton-mill industry is flourishing, don't spend all your money on cotton mills; put it in other factories.

Because some one has bought some property in the next town to yours, don't try to sell your lot at a fictitious price.

Don't try to establish an industry in your town when you know that it cannot pay. Its failure will cause far more injury than the amount of money spent in building it.

Tell the truth about your advantages, and let them be known by legitimate methods. Business men and capitalists are not guided by glittering generalities, but by plain facts and figures, in making investments.

When Northern people become fully convinced that money can be placed to good advantage in the South, hundreds of millions of dollars will be ready to be placed there. It is not lack of money; it is lack of acquaintanceship and of confidence that are the sole barriers to a much more rapid development of the Southern States than is now taking place.

It is the duty of every Southern banker, every Southern manufacturer, every Southern merchant, every Southern farmer, to help restore that confidence by discouraging illegitimate speculation and by striving to bring about only a sound and substantial growth.

Ridiculously Absurd.

Rev. Dr. Edward Everett Hale is seventy-three years old today, and received many congratulations. In speaking of his Southern trip he says: "I have just returned from a visit South, to Asheville and Hot Springs, N. C. I was charmed with Carolina, and should be glad to repeat the pleasure. People talk of a 'boom' in the South; I saw nothing of it. To me all seemed as wretched as poverty. I did not see a man at work, except convicts on the road."—Boston dispatch to Philadelphia Record.

The Rev. Edward Everett Hale is endeavoring to encourage emigration from New England to the West, and recently addressed a public meeting in Boston in advocacy of his plans, which seem to be connected with some extensive irrigation projects. Hence, his criticism needs no comment, except to say that, if correctly reported, he is either blind, and

thus could not see people at work, or else failed to follow the command, "Do not bear false witness."

Need of Textile Schools.

The Staunton (Va.) News follows the example of the MANUFACTURERS' RECORD by advocating textile schools in the following comment:

A movement has been set on foot in Charlotte, N. C., to establish a textile school in which to train young men in the art of making cloth. North Carolina is the second State in the South in her textile industries, South Carolina alone leading her, and it is quite appropriate that she should start a school that would train numbers of her youth in this great art. England and other European countries maintain their lead of this country in the more skilled industries largely because of the thorough training given in practical schools.

Such knowledge as this would be of great help to those Southerners now building mills by enabling them to locate their mills in the most favored sections. The New Englanders are largely relying on these differences of climatic conditions to keep their hold on the finer grades of goods. They claim that in some of the dry localities of the South electrical action on the cotton fibres and the absence of moisture a great part of the time make it impossible to do the highest grade of spinning, and there is undoubtedly truth in this claim. Very few places, if any, for instance, have been found in the United States where sewing-thread can be made equal to the English thread. The proper combination of moisture and heat is hard to find. This is one subject in the problem that is thoroughly discussed and made plain in a textile school. There are others in great number, and all must be understood by one who has a grasp of the whole industry. To reach the highest level the South must know these things, and the way to go about it is to establish schools in which they are taught.

England Fearing Competition.

The possibility of Alabama becoming an exporter of iron, as recently pointed out in the MANUFACTURERS' RECORD by Mr. Bowron, treasurer of the Tennessee Coal, Iron & Railroad Co., continues to cause much general discussion in this country and abroad. The London Ironmonger, however, goes even farther than the question of our becoming a competitor in pig iron, and inclines to the opinion that America may push England even in hardware, machinery, steel, etc. In a recent editorial on this the Ironmonger says:

In certain lines of hardware "notions," machinery, etc., American competition on a moderate scale has been with us for a long time past, but so far we have been free, practically, from transatlantic rivalry in the iron and steel trades. Certain occurrences now lead us to ask whether this immunity is to continue, or whether our already hard-pressed iron and steel manufacturers are to be called upon to meet their doughty foemen from the United States. If that competition does set in, and perhaps set in fiercely, we shall not be greatly surprised—indeed, in two or three lines we have been somewhat surprised not to have witnessed it before now. As things are now in the United States, there is every temptation to make experiment, and, given a little friendly manipulation of freights or benevolent "through rates" on the part of our shipping and railway lines, it may be quite possible to try a fall with us in our own markets. This would be—we will not say "is" just yet—reversing the old order of things with a vengeance; yet it is by no means an improbability in the very near future. Close observers have been well aware for some time past that Bessemer billets have been sold in the United States at about \$15—say 62s. 3d.—a ton, a price which we fancy has not been approached here by at least 7s. 6d. or even 10s. a ton for ordinary sorts. American Bessemer pig is also quoted at prices which we have not yet seen here, and in the opinion of some good judges it might be laid down in England or Scotland at figures which would surprise our own producers. Discarding mere surmise, however, we are told that some hundreds of tons of wrought-iron tubs have just been ordered at Pittsburg for use in London, and that hoops, scrap and certain kinds of finished steel have been ordered at the same place for use in Scotland. If these are facts—we do not pledge ourselves that they are—then we ought to know the reasons why we are thus beaten on our own ground. It should be the business of those who are more particularly affected to learn all about these matters, and then to take such steps as shall prevent any future mishaps of the same kind. If the fault

rests with the shipping "rings" or the railways, with labor or with the manufacturers themselves, the facts should be plainly and truthfully stated. It would be futile and ruinous to hide the facts or to play the part of the ostrich. If we are "in for" American competition—which is by no means an impossibility—we should try to quit ourselves as Britshers have always been famed for doing whenever they have found themselves in a tight place. We can do it if we will.

THE South is really the most prosperous section of the country. In the last five years its manufacturing interests increased 100 per cent. If this state of affairs continues it needs no ghost come from the grave to prove that the two Englands will soon find their occupation gone, so far as cotton weaving is concerned. The South is determined to become more than the manufacturing centre of this country—Jacksonville (Fla.) Times-Union.

The South is, indeed, progressing, but the MANUFACTURERS' RECORD does not look for the destruction of New England's industrial life. There will be great changes, and many interests will press to the South, but for the good of the whole country we trust that New England may prosper, and that out of its wealth may flow heavy investments to help enrich the South.

THE Massachusetts legislative committee was compelled to say that the South has advantages over any other section for the manufacture of cotton. These advantages are thus summarized in the report: Proximity to cotton-fields, cheap tenements, cheap coal, mild climate, low taxes, abundant water power and absence of restrictive labor laws. The list includes about everything that constitutes a desirable location for a cotton mill. The Massachusetts committee has given the South a superb advertisement.—Atlanta Journal.

Just as was expected, and just as the MANUFACTURERS' RECORD predicted they would. The South cannot have too many such committees from the North to examine its industries.

What Others Say of the South.

One of the most effective features of the *Southern States* magazine, of Baltimore, Md., is the department of letters from Northern persons who have settled in the South. For more than a year the *Southern States* has been publishing in every issue several pages of these letters, the writers giving their experiences in the South, describing the localities in which they have settled, telling about how they have been received and treated at the hands of the Southern people, correcting misconceptions about the climate, soil and products and about the social and political conditions of the South. These letters, coming from Northern people themselves, have proved in the North the most convincing possible argument in behalf of the South. They have been published without discrimination as to locality, and every Northern settler in the South is invited by the *Southern States* to send to it a letter giving his experience in the South and his opinion of the section into which he has moved. This is an opportunity that every Northern citizen in our community should utilize, and which every native citizen should exert himself to see utilized. Not only farmers, but merchants, lawyers, bankers and those of all trades and professions and callings who have moved to the South are offered the privilege of telling to their Northern friends through the *Southern States* magazine what advantages, attractions and opportunities there are in the South. The *Southern States* is doing an immense amount of good for the South. Its purpose, as announced in a standing article at the head of its editorial page, is "to set forth accurately and conservatively from month to month the reasons why the South is for the farmer, the settler, the homeseeker, the investor, incomparably the most attractive section of this country." The *Southern States* is published in Baltimore by the Manufacturers' Record Publishing Co., and is under the editorship and management of William H. Edmonds.

The Mineral-Water Industry as a Field for Investment.

With the development of bacteriological research and the discovery of the ease with which even the common and simple diseases are transmitted, there has come a closer scrutiny of one of the means by which such germs may be disseminated. Water, the great natural solvent, is also the great vehicle for the propagation of disease, and an urgent demand is, therefore, springing up for a purer water for drinking purposes.

Our cities, on account of the large amount of water required, are by force compelled in most cases to draw their supplies from rivers, which have in turn been the recipients of all the sewerage of the cities, towns and hamlets above. Nearly all city water, therefore, carries more or less dissolved or suspended impurity. In most cases the water is fairly within the limits of purity which may be demanded of such large supplies, and may agree fairly well with those who have become accustomed to it, yet its effect on that large class of individuals who are constantly in a state of unstable equilibrium between health and sickness must at times be serious.

Then to fastidious minds the water supply of cities is by no means attractive, even when shown to be harmless, nor can one's objection to muddy water be removed by a theory that a clay lining is a valuable addition to the stomach. Sewerage undoubtedly changes its entire chemical composition by oxidation, though the rapidity with which this is done is a much mooted point. In spite of this, water supplies drawn from rivers most probably always contain minute quantities of sewerage, though too little, it may be, to have any bad effect on health. A high authority has made the statement that one might drink with impunity water containing one-tenthousandth of its volume of undiluted sewerage, yet no one would hesitate between a water containing none and one containing one-tenth-millionth part of its volume of such material. These various causes have, therefore, led to a rapidly increasing demand for the purest possible waters for drinking purposes—a demand which, while now confined to a comparatively few and considered a luxury, will in time grow as ice has grown into a necessity.

The natural sources of such pure waters are the deep-seated and moderately deep-seated springs of the rural and mountainous districts. These springs are always more or less mineralized, and no doubt it has been the increasing demand for pure water which has had much to do with the rapidly-increasing demand for "mineral waters." How rapid has been the increase in consumption and the extent of the industry is shown by the following table, which is taken from the government reports for 1893, the latest information at present available:

Year.	Total consumption, Gallons.	Total value.
1883	7,529,423	\$1,119,603
1884	10,215,325	1,459,143
1885	9,148,401	1,312,489
1886	8,950,317	1,284,070
1887	8,259,609	1,261,463
1888	9,578,648	1,679,302
1889	12,780,471	1,748,458
1890	13,908,428	2,600,750
1891	18,392,732	2,996,259
1892	21,876,604	4,905,970
1893	23,544,495	4,246,734

On comparing the value of the sales for 1883 with the value of the products of other standard industries in the same year, we find that the total value of the salt produced is put at \$4,054,668; phosphate rock, \$4,136,070; cement, \$6,262,481; potters' clay, \$900,000; gypsum, \$696,615; borax, \$652,425; mineral paints, \$530,284. This gives some idea of the great extent and staple character of the industry. Mineral waters stand sixteenth in the tables of metals and minerals.

Of the Southern States, Virginia easily stands first with a product valued at \$187,045. Dr. Peale in the Bulletin of the United States Geological Survey on the "Mineral Springs of the United States" says: "Virginia occupies the same position among the Southern Atlantic States that New York does among the Northern Atlantic States in respect to both the number and the variety of her mineral springs."

Of the Southern States, North Carolina stands next to Virginia, with a product valued at \$79,926. The amount reported from the other Southern States is small.

One very striking feature is the value of the product per gallon. The average price per gallon at the spring was eighteen cents, and this is not for a small amount, but for 20,000,000 gallons, and is several times the price at which refined petroleum can be purchased at almost any point in the United States. In some sections the price seems to range very much higher. The average for Virginia is about thirty-four cents. An oil well seems to be "nowhere." Many springs have certainly proven rich harvests. It is currently reported that one extensively-advertised spring in Virginia yields a revenue approaching the interest on \$1,000,000. This is probably exaggerated, but the returns have certainly been large.

There are a number of reasons why a mineral spring may prove valuable as the basis of commercial enterprise. The market for mineral water is large and is undoubtedly rapidly increasing. The supply from a spring is practically unchanging in quantity and character, and, while limited day by day, is really inexhaustible. No two springs are exactly alike, and therefore each spring is a perpetual monopoly. Being a natural product, it is protected from the uncertainties of most manufactured products. The amount of capital necessary for its development is reasonable. The use of mineral waters in some form meets at present, I believe, the unqualified endorsement of the medical profession. It seems to be the general belief that water is not drunk in sufficient quantities and with sufficient regularity, and this can be secured by prescribing mineral waters. A large number of the profession also endorse them for their direct medicinal action.

There is a more or less careful classification of mineral waters, based upon their therapeutic effect; but, looking at them from a commercial standpoint—and it is from such a position that this article is written, and not from a scientific or medicinal one—the portable waters may be divided into three classes—table waters, mineralized table waters and medicinal waters.

All must be pure as regards any amount of organic matter or surface contamination. They must all stand bottling well, so that the consumer can rely upon getting the same material from day to day. And they must not, or at least the first two must not, contain any appreciable amount of those elements which have been found to be injurious to health when taken for any length of time, even in minute quantities. Both the table waters and the mineralized table waters should contain enough dissolved gas, carbon dioxide and air to relieve them of flatness and give the taste which is spoken of as "pleasant."

The table waters are those which carry a minimum of mineral contents, and that which is carried being of an inactive character. I do not mean to say that table waters may not be medicinal in their action. They are often so to those who have been drinking water strongly mineralized in character, and, indeed, even distilled water appears to have for a time a similar effect under like circumstances. The table waters are, however, those waters which possess the characteristics of a pleasant drinking water with a minimum of mineral contents and medicinal action. In the Bulletin of the United States Geological Survey on "Mineral Springs," by Dr. Peale,

is noted a spring carrying less than one grain of solid matter to the gallon. Along the western base of the Blue Ridge, in Virginia, is a series of springs which, so far as they have been examined, are of this class. They represent water distilled from the clouds and deposited on the clean, rocky tops of the sandstone ridges to rise again as springs.

The mineralized table waters possess all the good qualities of the first and something besides. They possess mineral contents sufficient in quantity and quality to be an object, and, in addition, have all the qualities which make them delightful table waters. These are the waters which I believe have the greatest future. They are such as to enable the consumer to supply a demand for a pure and agreeable table water, and at the same time furnish just the material which his system may have need of. With the great variety of substances held in solution, and with their endless series of proportions and combinations, it would be hard if one could not get what he wanted. The "Lithia Springs," of which the Buffalo Lithia in Virginia is typical, are of this class. The amount of lithium compounds is usually very small, but generally gives name to the water, because at present "lithia waters" are attracting special attention. In the Valley of Virginia they pour up in every direction through the siliceous magnesian limestone. The sagacity and energy of the proprietors of several of these springs near Staunton, in Augusta county, Va., notably the "Virginia Waukesha Lithia" and the "Seawright," have in the last year or two earned for them widespread and well-deserved reputation.

The third class, or medicinal waters, are those which have a strongly marked taste or smell, or which carry such quantity and character of ingredients as not to permit of their being used in very large quantities. They pass all the way from a small amount of mineral contents and a faint odor of sulphuretted hydrogen to saturated brines, and carry all things that are in the earth and the waters under the earth. They can only be used medicinally, but the sick, like the poor, we have with us always, and they are all in the market to purchase health, so that these waters will not go begging.

We cannot expect that mineral waters will take the place of drugs, though they may lessen the need for them. The materials held in solution in waters are for the most part mineral, while most of our drugs are vegetable compounds. But waters represent such a wide range of therapeutic value that if they are not available for all the ills that flesh is heir to, they can at least be relied on to benefit many of the ills that all flesh seems to suffer.

It is certainly an industrial field which is growing with great rapidity, and is well worthy the attention of careful capitalists. There are hundreds of springs containing great undeveloped commercial possibilities, which, to be realized, need but a small amount of capital, a careful examination, push and advertisement. They will never be of service to their owners or humanity unless the public can be induced to try and use their never-failing waters.

The records show that in no state are these opportunities more abundant than in Virginia.

CHARLES CATLETT.

Staunton, Va.

MR. W. J. THACKSTON, of Spartanburg, S. C., has prepared a concise yet complete handbook of that city which contains a remarkably large amount of interesting information about this enterprising and thriving city. The book is of a small size and has numerous illustrations of mills, schools, churches and streets, which give the reader a very intelligent idea of the town which Mr. Thackston has assisted in developing.

SOUTHERN GOLD ORES.

Some Strong Claims for Southern Properties.

[Special Cor. MANUFACTURERS' RECORD.]
SALISBURY, N. C., April 9.

About a year ago some excitement was occasioned by the finding of numerous nuggets of gold in the Ingraham mine, in Stanley county, about four miles east of Albemarle, but the excitement soon died down as people got used to it, and many thought that this find was only one of the many "pockets" that have been found in various places in that section.

For lack of water because of summer dryness work was practically stopped awhile. But the property did not escape the eyes of some wide-awake parties, and at the proper time it was bought by some New York and North Carolina people. These people formed the Crawford Mining Co., and put the well-known mining engineer, Mr. R. Eames, Jr., in charge as superintendent. Last fall Mr. Eames erected his plant for washing out the placer on the property, and from the beginning has made it pay. Being conservative people, they have pretty well kept their finds to themselves, yet occasionally it would break out that nuggets of good size had been found with the fine gold. Recently the finds have been so great it has been impossible to keep it a secret, but it is not known how much has been found in the clean-ups. It is safe to say, however, that not less than twenty-five pounds of gold, mostly in nuggets, have been taken out in the last thirty days.

About three weeks ago five pounds of small nuggets were brought up from there; then four pounds of small nuggets; then one two-pound nugget, and on yesterday a seven-pound nugget of solid gold was found, besides a double handful of small nuggets.

The news of the find was telegraphed here yesterday by Mr. Eames to his father, and today the seven-pound nugget was brought here by Mr. Eames, and will at once be shipped to New York to the company.

The excitement here when it was known the nugget was to be seen was considerable. It is safe to say a thousand people have seen and handled it today. It is somewhat heart-shaped, about seven inches long and five inches wide, and two and a-half inches in the thickest place. It is very free from quartz and impurities, only having a few pebbles attached to it by the manganese and iron and mud that have adhered to it. It is considerably water worn, and shows that it has traveled. Work is proceeding with increased energy.

Mr. Eames has been congratulated on all sides on his find, which, possibly, is the biggest one of the kind that has been made in North Carolina since the 28-pound nugget was taken from the Reed mine, in Cabarrus county, nearly a century ago.

Notwithstanding the assertion that there are no more bonanzas in North Carolina, the facts prove to the contrary, and there are other just such properties to be had; and, were this find in the West, the country would be overrun with prospectors in a week. Let them come here now. If such as the Crawford mine can't be had, there are many that will pay good dividends by legitimate working.

I hear the "Old Reed Mine," from which the 28-pound nugget was taken, has been purchased by some Ohio people, and will be put to work as a producer.

For those who do not care for placer mines, there are many good vein properties in this belt, and they can be made to pay. The only reason of their not now being at work and paying is because of the refractory nature of the ores. This objection is now removed. Mr. John Jacobs came here last fall, and he and the late James B. Lanier bought the Reimer

mine and started the erection of a chlorination plant. Just before the plant was ready to start to work Mr. Lanier died. This put a stop to operations for a while, but arrangements were made with his estate to resume operations. This was done, and last week the works were started, and today Mr. Jacobs is making a success by saving at least 90 per cent. of the assay value of the gold per ton, at a total cost of about \$2.50 per ton, so that any ores having a value above that can be worked at a profit, no matter how much pyrite the ore contains, or how refractory the ore is.

This is a success, and will be the means of rendering valuable and profitable the many hundreds of idle mines in North Carolina, and make it possible to get out some of the many millions of dollars that are now tied up in these mines and render it available in the shape of bullion. It will also prove the correctness of my article in the MANUFACTURERS' RECORD of February 16, 1894, which has recently been plagiarized by a ready North Carolina writer in the New York Herald.

Chlorination will save the gold contents of our very refractory Southern ores at a profit, but by the present process the other valuable contents are lost. Remedy this, and the South has the richest gold field of the world, not excepting the Witwatersrand or any other.

J. J. NEWMAN, M. E.

More Crops in Texas.

At the recent convention of Texas farmers a committee on reports of planting from various parts of the State gave the following summary:

"On acreage we find the average increase of corn crop as compared with the previous year to be 22½ per cent.

"Increase in other grain crops is 28½ per cent.

"Increase in hay and forage crops, 20½ per cent.

"Increase in hog product, 26 1-5 per cent.

"Cultivated land lying out amounts to three-quarters of 1 per cent.

"The decrease in cotton acreage is 29 per cent. All the estimates are based on a comparison with last year."

This shows that Texas is a pioneer in diversified farming, and from present indications will reduce its coming cotton crop nearly 30 per cent.

The report speaks well for the common sense of the farmers of that State, and the assurance that Texas, which plants cotton earlier than the other States, has reduced her cotton acreage gives good ground for hope that there may be a general co-operation on this line among the farmers of the South.

The MANUFACTURERS' RECORD trusts that every Southern State will take as sensible and safe a farming course as that which has been adopted in Texas.

A Desirable Texas Town.

The people of Alvarado, Texas, appreciate the advantages of their location and are making earnest efforts to increase its population and manufacturing and trade interests. It now has a cotton-oil mill which pays out nearly \$150,000 annually for crude oil to be refined, and its freight shipments for the last six months by rail reached the aggregate of \$803,150. The oil mill has demonstrated the fact that Alvarado lies in the great artesian belt, and that good, pure, flowing water, suitable for all purposes, from the laundry to the generation of steam, can be had by boring not deeper than 1300 feet. There are eligible sites around Alvarado for the location of mills and factories; real estate has never experienced a boom and is still sold at low figures, rents are low, food cheap, climate good, while two lines of railway assure freight rates at competitive prices. One of the leading physicians declares that the section is free from malaria.

SOUTHERN COAL IN WEST INDIES.

A Great Opportunity Awaits Coal Shippers in this Section.

[Special Corres. MANUFACTURERS' RECORD.]

PORT CASTRIES, SANTA LUCIA,

WEST INDIES, March 18.

Virginia has the opportunity of her career to benefit herself and the United States, enlarging her own trade and commercial reputation and adding to the trade importance and supremacy of our United States commerce in a most important matter, and I wish to give you the facts and have your powerful paper to press it on the business men of our country.

Great Britain, with 10,000 square miles of coal, sells over 20,000,000 tons of it, worth \$70,000,000, to the outside world, and 2,500,000 tons to these South American countries, stocking the coaling stations of the world and supplying the world's steamships. It has given her a powerful advantage. When she has no other cargoes to send out, her shipping can take out coal and get return cargoes. And we have been unable to compete with her. In the first place, it has been supposed that she had a better steam coal than we have in her fine Welsh coal, and she has been able to mine and sell it at a cheaper price than ours.

But we have in Virginia and elsewhere a better steam coal than Welsh coal. We can mine it and sell it cheaper than hers, and there should be an organized movement of capital and enterprise to push this matter on.

In my trip through South America on the mission of introducing to these countries our great international exposition at Atlanta, and get these governments to take part in the vast object of enlarging the international trade of the United States, and especially with the Pan-American countries, in which I have been so successful, I have taken a special interest in looking into the coal resources of these countries, not only in connection with manufacturing, but with coaling the merchant marine that does their trade. I have found coal everywhere nearly, but almost wholly undeveloped, and seeming on trial to be an inferior coal, with very little exception. Chili has very good coal, and is mining it on a fair scale. All the coal used here is brought from England, and Argentina, the most advanced country in manufacturing, supplies its large industries with British coal wholly. And every one of the coaling stations uses mainly British coal, until recently the Pocahontas coal of Virginia, shipped out from Norfolk, is getting a foothold at this important coaling station of "Castries," the capital of the island of Santa Lucia, in the south of the West Indies.

St. Lucia is a small island twenty-five miles long and six to twelve miles wide, with about 50,000 people. Castries is a picturesque little place of 5000 people, and its main support is coaling ships. It is a pretty, antique place, set on the ocean in a land-locked small bay, and environed by hills, and the largest ships come to the wharf and get their coal.

I have come by here on my way from Montevideo to Caracas, and am waiting to catch a steamer across to La Guayra. I will give you the testimony as to this coal, and the chance it gives for great things, from an official report just published by the English government this year, furnished by Sir Julian Pauncefote, British minister to the United States at Washington, whose second secretary of the legation, Hon. Arthur Peel, made a special visit to these and other mines and furnished the report. Coming from the source it does, its favorable statements are worthy of especial consideration, and they have an overwhelming importance just at this especial juncture, and merit the serious thought of our statesmen and leading

business men on account of their immense reach of result.

Says Mr. Peel, and his words are pregnant with significance in a matter in which his great and enterprising country has easily lead the world:

"It is an error frequently indulged in to suppose that England has now the command of the cheapest coal in the world. On the contrary, so far as the United States are concerned, it is said that we have even to face the prospect of being permanently dislodged from our former supremacy as a coal producing country."

He further says: "The United States have for some years past been producing their coal at a cost not much exceeding half of that of many coalfields at home (in England)." And he mentions that in 1893 "some cargoes of their coal have already been landed in England."

The Pocahontas coal, which has achieved such results, is mined in Tazewell county, Virginia, 386 miles from Norfolk, where the Lambert's Point piers, 2800 feet long, with berths for twelve of the largest steamers, that can receive their coal direct from the wagons of the Norfolk & Western Railroad, are the finest coaling station in the world, and the favorite coaling place for steamers from Southern United States ports, of which 500 call there yearly. There are always 5000 tons of coal in trucks. Pocahontas is the only coal supplied to steamers at this point. Cars are loaded right at the mines. This coal is now largely used at this coaling station, and can be laid down here for 20¢ a ton, against 23¢ for Welsh coal. Peter & Co. are agents for it. Wm. Peter is United States consul here. They keep 6000 tons on hand, and it is gradually displacing the Welsh coal.

This is the entering wedge to an extensive coal trade. With proper effort, this and other Southern coal can be everywhere used in these countries and at all these important coaling stations. The trade and navigation are in their infancy down here, and the time has come for American interests to be pushed. This great exposition is the agency. It is well started. And the opportunity should not be lost to use it to the utmost.

I. W. AVERY.

Want Them to Come South.

The Alabama Department of the Grand Army of the Republic has adopted these resolutions:

"Whereas, there is a strong desire among many of our comrades of the Northern States to emigrate to the South; and, whereas, the large manufactories of the North are making investigations with a view of coming to this mild climate, with its inexhaustible supply of cotton, coal, iron, timber and varied resources; and, whereas, Alabama (our adopted State) possesses unequalled advantages in climate, soil and resources to furnish homes for farmers, manufacturers and laborers; and, whereas, the people of Alabama extend a cordial invitation to our comrades of the North to make their homes with us; and, whereas, the convention of the Commercial Association of Alabama, at its recent meeting in Birmingham, passed resolutions inviting Grand Army colonizations throughout the North to make Alabama their home;

"Resolved, That the State Encampment of the Grand Army of the Republic of Alabama extends to all of our comrades a most cordial invitation to make Alabama their home, hereby pledging ourselves to do all in our power to aid them in securing suitable locations for farming and for any branch of industry they may wish to assume."

THE people of Chattanooga have organized a Young Men's Business League, and have appointed committees to select officers and prepare a constitution and by-laws.

RESOURCES OF THE SOUTH.

The New York Financial Chronicle's Elaborate Review of Southern Advantages.

Under the title "Resources of the South" the Commercial and Financial Chronicle, of New York, devotes over two pages to an exhaustive and well-written editorial, in which Southern conditions are clearly and strongly presented to its readers with a conservatism and candor in keeping with the high standing of this eminent authority on finance and investments.

The editorial was inspired by articles which have appeared in the MANUFACTURERS' RECORD and the symposium of views given in a late number of the New York Independent. "There can be no doubt," says the Chronicle, "that the South possesses resources second to no other section of the country, and in some respects greatly superior to any. To say this is to say that she offers exceptional opportunities for the investment of capital, the creation of wealth and an increase of population. It is also a fact that during the last ten years, owing to the recognition of the advantages which she possesses in these various ways, there has been a considerable influx of outside capital, and wonderful growth and development of the Southern country. At present the South is suffering from the low price of cotton, but we get an idea of the progress already made when we see Southern ironmakers giving serious consideration to the proposition whether they can export iron to foreign countries in competition with the iron of Great Britain. The MANUFACTURERS' RECORD, of Baltimore, had a letter last week from Mr. J. Bowron, the secretary and treasurer of the Tennessee Coal & Iron Co., in which the question is discussed. Mr. Bowron speaks very guardedly, but what he says possesses all the more value on that account. He states that the subject of the exportation of iron has occupied the attention of his company for some time, and he gives his conclusions in these words: 'I have become perfectly satisfied that starting, as we do, with the price about \$2.50 per ton for gray forge or No. 3 foundry below the f. o. b. Middlesbro' price for similar grades, we certainly ought to be able to compete in neutral markets.' * * *

"Unfortunately, American producers are handicapped by the fact that the tonnage of our exports largely exceeds the tonnage of our imports. We require double the steamer room for shipment across of our grain, cotton, lumber, oil and provisions that is needed for the conveyance back again of tea, silks, cutlery, etc., which we import. This fact enables the English ship-owner to make the American charterer pay the cost of the round trip, and he is willing to accept a mere ballasting rate from England outward to this country. I am afraid from this cause that it will be impossible for some time to sell any iron in England unless it can be shipped to Manchester in conjunction with cotton. The markets of the Mediterranean and of the Baltic are not, however, subject to the same remarks, except to a limited extent, and I am quite hopeful that the rates which are now under the consideration of the Southern railways to Mobile, Pensacola and Savannah for foreign shipment will enable us actually to commence business with Italian, Spanish and Russian ports."

"This illustrates the development only in one branch of industrial activity. What is going on in another direction is shown by the reports of the starting up, even in these times, of new cotton mills in various parts of the South. The transfer of New England capital and New England cotton mills to the Southern States has also recently developed new growth, showing the tendency of things. Mr. Latham in his paper refers to this feature and notes that the Massachusetts Cotton Mills, of Lowell,

has decided to build a \$600,000 mill in the South, and that the Dwight Manufacturing Co., of Chicopee Falls, has decided to erect a \$500,000 mill. And both this movement and the other movement may reasonably be expected to continue. We need not accept Mr. Latham's statement that 'it is safe to prophesy that twenty years from now nearly all the cotton manufactured in this country will be manufactured in the South, except particularly fine lines of goods that require the most expert labor,' and yet it is obvious that having the raw material and the fuel at her doors (an advantage which the New England mills, removed from the sources of supply of both, do not have), and possessing also cheap labor in abundance, her progress in cotton-manufacturing is certain to be rapid.

"Evidence of Southern growth and development is also found in the great increase in the value of property which occurred during the last census decade. Senator Walsh refers to this fact, and points out that between 1880 and 1890, despite all disadvantages, there was an increase, according to the census, of \$3,800,000 in the value of property in the South, against an increase of \$3,900,000 in the New England and Middle States combined, the percentage of gain in the former being 50 per cent. and in the latter 22 per cent. In such facts as these we see reflected the possibilities of the future, for as yet the vast resources of the Southern States have barely been touched."

The Chronicle then calls attention to the elaborate plans for the Cotton States and International Exposition, with its expenditure of nearly \$2,000,000 for buildings alone, and describes the advantages which will be gained to the South by the opportunities afforded to display its mineral and other sources of wealth. Calling attention to different articles in the Independent, the editorial points out through them what opportunities await the manufacturer, the farmer and the financier who will investigate this section of the country.

Annual Report of the Tennessee Coal, Iron & Railroad Co.

At the recent meeting of the stockholders of the Tennessee Coal, Iron & Railroad Co., President N. Baxter, Jr., submitted his report of the year's work of the company. The report calls attention to the fact that the prices of iron continue low, and are at the lowest point ever known in the history of the world, and, though this condition exists, the production and consumption of iron are large in the face of the fact that car-building has decreased from 100,000 cars built in 1892 to 17,000 in 1894. The cessation of car-building necessarily prevents the consumption of large outputs of iron, but notwithstanding this market for iron is closed, President Baxter says there are evidences of improvement seen in the increased consumption and in the more active purchasing.

Of the seventeen stacks owned by the company, only eleven are in blast, but the output per furnace continues large, and the cost of production has been greatly decreased, and the output for March, 1895, was the largest in the history of the company, while the per centum of high-grade iron has also increased, and its reputation for foundry purposes has been maintained. The condition of the various plants is good, and the physical condition of the property has been well maintained.

The strike which occurred on April 14, 1894, seriously affected the coal output as well as the iron output, but since September last the coal output has been the largest in the history of the company. The effects and details of the strike are set out at length, and the opinion is advanced that the reduction resulting in the cost of coal of seven and a-half cents per ton will in a few months make good the losses suffered during the strike. By the extension and

renewal of ore contracts for a period of six years a reduction of 20 per cent. is made in the cost of ore, which is in addition to a reduction of 10 to 15 per cent. per ton made during the early part of 1894, and during March the furnaces have been run at this reduced cost.

Because of these long-time contracts, the lower cost of ore, coal and lime-rock, President Baxter is of opinion that the coming year's business will be entirely satisfactory to the company in every way, and that the ability of the company to produce satisfactory results was never better than now. The volume of business is large, cost of production the lowest in this or any other country, and any slight improvement in prices will yield a large profit. During the year coal-washing machines were erected at Tracy City, Johns and Pratt mines, and these machines have helped to lower the cost of production by furnishing a better grade of coal, both for open market and coke ovens, while the improvement produced in the coke has enabled the company to compete successfully with the English and Eastern coke in Mexico and other distant markets, and this trade bids fair to continue and develop to immense proportions.

In conclusion, President Baxter tells the stockholders that there is no one thing of so great importance to the company as the building of the Nicaragua Canal, by which the company's products would reach markets at present closed to it.

The tone of the report is hopeful and confident, the business affairs of the company shown to be closely looked after in every department and the plants in operation in most excellent condition.—*Nashville American.*

A Handsome Steamer.

The *Newport News* (Va.) Shipbuilding & Dry-Dock Co. has launched a steamer for the Norfolk & Washington Steamboat Co. which will be named *Newport News*. She is 274 feet long, with a width of forty-six feet. She is contracted to have a speed of twenty miles an hour, but it is possible that this will be exceeded. Her steel hull is divided into eight water-tight bulkheads, and will contain two double-cylinder boilers thirty-two feet in diameter. In general arrangement the *Newport News* will resemble other boats of the line, her interior finishings being of white and gold. She will have ninety staterooms, of which twenty-eight will be bedrooms, and the furnishings will be of imported material. The rooms will be finished in hardwood, and in every detail the vessel will be handsome, modern and convenient.

Chance for an Ice Factory.

A company of Washington (D. C.) capitalists are looking about for a suitable locality to locate an artificial-ice plant, and would be glad to have offers of towns of some size setting forth inducements. Address "Ice Company," care of MANUFACTURERS' RECORD.

Wants to Come South.

A dispatch from Middletown, Conn., states that the Russell Manufacturing Co., of that city, employing 1200 hands, is still considering an invitation from several places in the South to transfer its business. One of these offers may soon be accepted.

Monazite Wanted.

Messrs. T. H. White & Co., 104 Commerce street, Baltimore, advise the MANUFACTURERS' RECORD that they desire to correspond with parties having monazite to sell.

SPECIMENS of monazite have been found in several places near Taylorsville, Alexander county, N. C. Mr. J. M. Matheson is one of those who discovered the mineral.

BALTIMORE REAL ESTATE.

Over \$750,000 Worth of Unimproved Suburban Property Sold Recently.

The activity in real estate in and near Baltimore within a few weeks has been very pronounced. The MANUFACTURERS' RECORD has prepared a summary of the more important sales of property, which is as follows:

Lyndhurst property, owned by the Reverdy Johnson estate, 286 acres on Edmondson avenue extended, to a syndicate comprising Edward Stabler, Jr., Joshua Horner, Jr., Henry A. Brehm and Joseph Paul, of Baltimore, and Edward C. Burkhardt and Joseph A. Oakes, of Buffalo; also Wm. F. Lamdin, of Baltimore.

Mount Carroll tract, forty-six acres in northwestern suburbs; price paid \$171,000; sold by North Baltimore Land & Improvement Co. to a Baltimore syndicate. This tract was offered about a year ago for \$100,000 without any takers.

Radnor Park, several miles west of the city, sixty-five acres, sold to Alonzo W. Cooke for \$25,000.

Tract on Clifton avenue in Walbrook Park, sold by Goldsborough Griffith and the National Union Bank to Lawrence N. Frederick; price paid \$15,000.

Lot on Guilford avenue, near Preston street, by Francis White to Eben B. Hunting; price \$28,000.

Tract of nine acres in Hampden suburb, north of the city, by Basil B. and Douglas H. Gordon to C. E. Cunningham; price about \$60,000.

Tract of fifteen acres on Lake Roland, several miles north of the city, by David Stewart to Mrs. Casey, of Philadelphia; price \$15,000.

Tract of thirty acres near Catonsville by L. Coblenz and James A. Gary to John Hubner and others; price about \$20,000.

Tract of forty-seven and a-half acres near Walbrook to Selbernam Heights Improvement Co.; price \$40,000.

This represents only a portion of the land that has been transferred from one owner to another, but it is a very significant indication of the upward trend of real estate in and near Baltimore. Altogether the sales specified amount to over 500 acres, with a valuation of fully \$750,000. Some of these tracts brought fully double what was asked for them less than two years ago.

Georgia Manufacturers.

The movement to organize a manufacturers' association in Georgia was encouraged at a meeting held in Atlanta, which was largely attended and which adopted these resolutions:

"Whereas, Over two hundred replies have been received endorsing the proposed convention and expressing opinions in favor of united effort to secure a better demand for our products and to promote the general interests of manufacturing in the State; therefore, be it

"Resolved, That the manufacturers of Atlanta, in mass-meeting assembled, heartily commend the movement as timely and promising great benefit, and that we invite the manufacturers of Georgia to meet in convention in Atlanta, May 7th and 8th proximo, for the purpose of organizing the suggested association; and be it further

"Resolved, That the chairman of this meeting be authorized to appoint a committee of twelve Atlanta manufacturers to issue a formal invitation to the manufacturers of Georgia, and to perfect arrangements for holding said convention and facilitating its work."

The following-named committee was appointed: Dr. J. D. Turner, George Winslow, Jacob Haas, Martin F. Amorous, Louis Newett, V. W. Cleveland, A. A. De Loach, E. Van Winkle, W. D. Palmer, John Oliver, Isaac S. Boyd, John M. Green, T. H. Martin, secretary.

Texas Cotton Palace Will Be Rebuilt.

WACO, TEXAS, March 14.
Editor Manufacturers' Record:

For several weeks the Cotton Palace has been in doubt, but a mass-meeting of the citizens last night settled the question for good, and the new palace will be on a grander scale than the one recently destroyed by fire. The first Cotton Exposition held in Atlanta in 1880 marked the beginning of the growth in manufacturing of that great manufacturing city—one in which we Texans are proud of and point to as an example of what nerve, pluck and enterprise will do. Our Texas cities, leaving out Dallas, have very few manufacturing enterprises, being supported by the wonderful agricultural products of the most fertile State in the Union, but the question now is can these cities continue to grow while farm products of all kinds are low in price, in some instances barely covering the cost of production? Naturally, thinking men are casting about for new things, and it is generally conceded that all sorts of manufacturing enterprises will follow in the wake of these expositions, as was the case with Atlanta. High rates of interest hurt manufacturing in Texas, and the great want is cheaper money.

W. T. CHRISTOPHER.

THE thirtieth anniversary of Lincoln's assassination, falling in April, will be commemorated by the publication in Harper's Weekly of two noteworthy articles, of which the first will discuss the sources of Lincoln's eloquence, and the second will be devoted to the Lincoln genealogy, tracing the line back to New England stock. The second article will be contributed by Lucius E. Chittenden, register of the United States treasury during the period of the civil war, and an intimate friend of the President himself, as well as of many of the leading men connected with that administration.

THE Savannah Board of Trade has elected the following officers: President, D. G. Purse; vice-president, W. C. Powell; directors, S. P. Shotter, H. T. Moore, I. M. Frank, C. D. Baldwin, John H. Hunter, T. S. Wyly, M. B. Lane, J. M. Dixon, C. G. Dahl, J. B. Johnson. Mr. Purse has acted as president of the board for four years. He is an energetic and progressive business man and eminently fitted for his position.

THE tonnage of vessels clearing from Mobile in March, 1895, exceeds the record of the year of 1893 by very nearly 5000 tons in a total of less than 60,000 tons. The record is 10,000 tons ahead of that of 1894, and 12,000 tons ahead of that of 1892. This shows how the commerce of the city is developing.

THE Little Rock, (Ark.) Board of Trade has elected the following board of directors: W. W. Dickinson, W. T. Wilson, C. T. Abeles, J. W. Pope, W. H. Ragsdale, J. G. Fletcher, J. A. Fones, W. S. Mitchell, H. P. Edmonson, Allen N. Johnson, C. F. Penzel, G. R. Brown, J. H. McCarthy.

Staunton, Va.—R. S. Turk: "The general outlook for business is much better with us. Wheat and cattle have both advanced in price, idle industries are starting up, and others are increasing their forces. Some farms are selling to persons who have come from other States, and, whilst prices are not high, it is encouraging to know that there is this movement in land. In our own town property has been changing hands, and many new and costly buildings are begun and will be completed during the summer."

Tallahassee, Fla.—M. B. Rice: "Business is picking up, and the outlook is good; will have large pea crop, and business generally in good condition."

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 174.]

A Year's Earnings of Southern Lines.

The excellent financial showing made by Southern railways as a whole in 1894 has called forth an elaborate review of their operations in the Daily Stockholder, of New York, from which the MANUFACTURERS' RECORD quotes the following:

"All in all, Southern roads did well in the late year. Influences which worked great hardship to Western properties were practically absent in the South proper. It is also true that in that section there were missing many factors which assisted in unmaking business and receipts in the thickly-settled manufacturing districts of the North and East and upon the great trunk lines. Against an average decrease of 11.26 per cent. in the gross earnings of the country at large, the South shows a decrease of only 2.8 per cent.

"The Southern roads made the best average exhibit of any group of roads. It was beaten as to profits only by the New England group, where there was a gain. But it must be remembered that the South had the conspicuous advantage of an enormous cotton movement. As compared with 1893 this is represented by an increase in the number of bales carried of 22 per cent. There were transported overland 1,699,793 bales, an increase of 292,326 bales, and there were received at the ports 6,588,268 bales, an increase of 1,180,312 bales, or a total increase of nearly 1,250,000 bales. In addition, crops in the South were good, and shipments, impossible under normal conditions, were made to many points usually served by other sections. What the exhibit of earnings and profits would have been like with the gain in the cotton movement eliminated can only be conjectured. It is certain that the influence it exerted upon the totals was quite marked, and that from this cause and the strict enforcement of economies in operation many roads were enabled to put before their stockholders statements of a much more pleasant nature than would have been possible otherwise."

The Knoxville-Port Royal Scheme.

The "Ohio River, Knoxville & Tide-water" project, which is being promoted by Albert E. Boone, of Zanesville, Ohio, was discussed in a mass-meeting at Knoxville, Tenn., held on the 4th inst. Mr. Boone explained his plans, and asked that \$200,000 be subscribed for a promoting fund, to be raised in South Carolina, Georgia, North Carolina, Tennessee and Kentucky. Resolutions were adopted favoring the scheme and endorsing Mr. Boone. Delegates from South and North Carolina and Tennessee were present. This is the proposed line from Knoxville to Port Royal, S. C., by way of Rabun Gap. Two hundred thousand dollars for "promoting" a fund is a very mild request, but we imagine that Colonel Boone will hardly secure it.

Heavy Travel South.

A prominent Eastern passenger agent says that one of the most remarkable things in the passenger situation is the heavy travel South, which is steadily increasing. He thought that for the next five years the exodus to the South would equal that of the most noted periods of immigration to the West and Northwest. He said this was largely attributable to the fact that the Southern roads are now following the tactics of the Western and Northwestern lines to secure the settlement of people on their respective lines, many of the roads having secured the services of men who were successful in building up this class of business on the Northwestern roads and placed them at the head of passenger de-

partments, with instructions to be aggressive and lay out such schemes as they did when on the Northwestern lines to get the country settled, and they are going about it systematically and with vim.—Philadelphia Stockholder.

Fast Time on the Baltimore & Ohio.

A Royal Blue Line train on the Baltimore & Ohio made a remarkably fast run recently between Philadelphia and Washington, D. C. The train consisted of five coaches, all of the Royal Blue Line pattern. The time consumed between Philadelphia and Canton, including a stop at Wilmington, Del., was one hour and thirty-seven minutes; from Canton to Washington, including transfer across the harbor, one hour. The whole time between Philadelphia and Washington, including stops and transfer, was two hours and thirty-seven minutes, a fraction less than sixty miles an hour for the one hundred and thirty-six miles, including stops. The train service on this division has no superior in this country.

Officers Elected.

At the meeting of Morgan's Louisiana & Texas division of the Southern Pacific, C. P. Huntington, New York; A. C. Hutchinson, J. G. Schriever, John B. Richardson, New Orleans; J. Kruttschnitt, Texas, were elected directors.

The board of directors of the Southern Pacific Railroad Co. re-elected C. P. Huntington president by a unanimous vote. All of the subordinate offices were filled by the men previously holding them. In every case the election was unanimous.

At the annual meeting of the Houston & Texas Central the following directors were elected: Thos. H. Hubbard, J. E. Gates, of New York; G. A. Quinlan, C. W. Bein, T. W. House, J. M. Lee, J. K. Kruttschnitt, A. P. Root, E. W. Cave. The following were elected officers: President, Thos. H. Hubbard; vice-president, G. A. Quinlan; secretary and treasurer, E. W. Cave; assistant secretary and treasurer, I. E. Gates.

Railroad Notes.

THE Brunswick & St. Simons Street Car Co.'s plant was sold to J. E. Dubinor, A. Lane and others.

THE Louisville & Nashville has received authority from the government to carry goods in bond coming from Europe to points on its system.

MR. B. HOWARD PAYNE has been appointed assistant general passenger agent of the Missouri Pacific system, with headquarters at St. Louis.

THE Edmondson Avenue, Catonsville & Ellicott City Railway Co. has elected George Yakel, president; Louis Yakel, secretary, and William Layfield, treasurer.

WILLIAM A. NETTLETON has been appointed superintendent of motive power on the Kansas City, Memphis & Birmingham. He is the son of President George H. Nettleton.

THE South Baltimore Car Works has closed a contract with the Baltimore & Ohio for the construction of 300 refrigerator cars, and work will be commenced upon them at once.

WHAT is claimed to be the heaviest trainload of cotton ever shipped from that city recently left Memphis on the Illinois Central. It consisted of 10,521 bales, all billed through to Liverpool by way of New Orleans. The largest previous shipment was 6,175 bales.

AT the annual meeting of the Galveston, Houston & Henderson the following officers were re-elected by the directors: J. L. Kane, president; R. B. Baer, vice-president; A. A. Vanalstyne, secretary and treasurer, and O. S. Hegd, assistant secretary and treasurer.

FINANCIAL NEWS.

Southern Banks Gaining.

According to the last national-bank report made to Comptroller Eckels, the banks in the South and West have overtaken the Northeastern banks, and show a heavier proportion of increase in their principal items of account than the others. The banks of the country as a whole do not show quite such large discounts as appeared in December, and show also a slight loss in individual deposits, but there is a considerable increase over the figures of a year ago in both items.

The following table gives the aggregate loans and discounts for the country as divided between the Northeast and other sections of the country:

Banks.	Oct. 3, 1893	Oct. 2, 1894	McH. 5, 1895
Northeast	\$1,079,146,940	\$1,194,761,359	\$1,149,483,622
Other....	764,487,227	812,360,792	802,363,210
Total...	\$1,843,634,167	\$2,007,122,191	\$1,951,846,832

These figures show that while the Western and Southern banks have lost slightly in loans and discounts since October, they have not lost so much as the banks of the Northeast. The change is not significant of a decline in business, for the month of October for a long series of years has shown higher discounts than December following or June or July preceding, and the difference between the midsummer and October dates has usually been in the neighborhood of \$50,000,000. The decline, therefore, at the present time is only the normal reaction from the expanded discounts of the autumn. The Western and Southern States show a distinct gain in individual deposits over the record for last October, which is in marked contrast with the considerable falling off shown by the banks of the Northeast.

New Financial Institutions.

An effort is being made to organize a bank at Asheboro, N. C., with \$50,000 capital.

The Washington (Ga.) Loan & Banking Co. has been organized with \$25,000 capital. Dr. G. E. Lynden is president, and Boyce Ficklen, cashier.

The Bank of Summers has been organized at Hinton, W. Va., with H. Gwinn, president; L. P. Graham, vice-president, and J. H. Jordan, cashier.

John Schumacher, of La Grange, and Verger, Hill & Son have opened a private bank at Smithville, Texas, under the name of the Bank of Smithville.

Morgantown, W. Va., is to have another bank with a capital stock of \$25,000 and with the intention to increase it to \$100,000. Geo. C. Baker is one of the prime movers in the enterprise.

B. S. Jerman and W. E. Ashley, of Raleigh, are interested in a proposed insurance company to be organized under the title of the South Atlantic Life & Endowment Co. of North Carolina.

A charter has been issued at Norfolk to the United States Mutual Protective Insurance Co. The capital stock of the company is to be not less than \$20,000 nor more than \$40,000. The officers are Norfolk citizens.

The Salisbury (N. C.) Loan & Trust Co. has been organized. Mr. W. L. Kluttz was elected president; W. Smithdeal, vice-president; Theo. F. Kluttz, attorney, and J. S. McCubbins, Jr., secretary and treasurer. Rev. F. J. Murdock, O. D. Davis and W. A. Smith, of Ansonville, with the officers, comprise the board of directors. The company will have two departments, a trust and savings bank.

A charter has been granted to the Virginia Live-Stock Insurance Co. of Richmond, whose purpose is to insure its members against loss arising from death of

domestic animals by disease or accident, including fire and lightning, to be conducted on the assessment plan. The capital stock is to be not less than \$10,000 nor more than \$50,000. The officers are as follows: I. J. Hawkes, president; B. C. Cook, vice-president; W. J. Watkins, secretary and treasurer.

New Bond and Stock Issues.

Steiner Bros., of Birmingham, Ala., have purchased forty-five Madison county (Ala.) 5 per cent. bonds at 102.

The city of Palestine, Texas, has sold \$18,000 worth of refunding bonds to J. C. James, of Austin, at 101 1-10.

An issue of \$200,000 sewer bonds of San Antonio, Texas, has been sold to the Alamo National Bank, of that city, at par and accrued interest.

The city of St. Louis will sell \$975,000 in refunding bonds bearing 3.65 per cent. interest. Bids will be opened by Mayor Walbridge on April 23.

The trustees of Wesleyan Female Institute, of Staunton, Va., are considering the idea of issuing 5 per cent. bonds to fund the institute's indebtedness.

Davidson county, Tenn., in which Nashville is located, will issue 4, 4 1/2 and 5 per cent. refunding bonds. Bids will be received for their purchase up to May 1.

Interest and Dividends.

The directors of the Vance Cotton Mills have declared a quarterly dividend of 4 per cent., payable May 1 at Salisbury, N. C.

Financial Notes.

THE Charleston (S. C.) State Savings Bank has elected Isaac S. Cohen, president; Lee Loeb, vice-president, and R. B. Gilchrist, cashier.

THE directors of the Guardian Trust & Security Co. of Baltimore have re-elected officers as follows: Edward Stabler, Jr., president; Daniel Miller and Jonathan K. Taylor, vice-presidents; Wm. M. Byrne, secretary and treasurer; Geo. M. Sharp, counsel.

THE Fidelity & Deposit Co. of Baltimore, of which Mr. Edwin Warfield is president, has received authority to transact business in New York State, and is making arrangements to do so on an extensive scale. This company has been remarkably successful in Southern territory.

THE Norfolk Real Estate and Stock Exchange has been chartered with Thomas Townsend, president; T. F. Rogers, vice-president; W. B. Baldwin, secretary; H. L. Page, treasurer, and A. Myers, J. V. Lei h, D. McCormick, L. D. Smith, G. M. Pollard, A. P. Pannill, J. P. Andre Mottu, H. N. Page, John B. Whitehead, A. W. Cornick, F. E. Nottingham, Walter Sharp, W. B. F. Slaughter, H. C. Hoggard, W. R. Fentress, W. H. H. Trice, W. M. Hannah, directors. It comprises the principal real-estate operators of the city.

SALMAGUNDI is the name of a new paper published by the management of the Seaboard Air Line Railroad Co. for gratuitous circulation. Its purpose, as stated in the first issue of the paper, is not merely to advance its own interests, but to promote the development and welfare of the South, especially those sections interested or reached by its main, diverging and connecting lines. The initial number is well arranged and contains much valuable information.

MR. C. C. ALLEN has been appointed to the position of land commissioner of the Gulf, Beaumont & Kansas City Railway Co., with headquarters in Beaumont. Mr. Allen, who is well and favorably known in Texas, was formerly and for ten years land agent for the Gulf, Colorado & Santa Fe, and later connected with railroads in North Texas.

SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 172 and 173.]

Economy in Cotton-Raising.

WILMINGTON, N. C., April 6.

Editor Manufacturers' Record:

Much has been said and more written regarding the ruinous prices at which cotton has been selling for the past three seasons, and many theories advanced to devise the best means for bringing about a better condition of things and restore the prices of former years. To avert the impending danger and save the planter from bankruptcy, these efforts in the main really embody but two ideas, and can be summed up in the following suggestions—either reduce the acreage or hold back the crop on hand. But those most interested in these efforts seem to have overlooked one very significant fact. There has never been a product in the history of the world, gold excepted, which did not depreciate in value as its field of usefulness broadened. Cheaper and improved methods for producing and handling are always, of course, a necessary requisite, but these invariably materialize as soon as their need is felt. Cotton is no exception to this universal law. The demand for cotton goods grows more widespread every year, and with it increased facilities for supplying this demand, with a proportionately, or we might say disproportionately greater crop, resulting in keener competition and lower prices, especially for the raw product.

There is but one logical solution of the problem for the mass of planters, and that is to yield to the inevitable, accept the lower prices, which have to all intents and purposes come to stay, and cast about for new and cheaper methods for manipulating the crop and preparing it for market, by this means bringing the cost of production down to a figure consistent with the present market values. To quote from the *Encyclopaedia Britannica*, the cost of cotton production in the United States has by no means been reduced to a minimum. This is a truism, for we can and must adopt less expensive methods in several details of the industry.

The MANUFACTURERS' RECORD of March 1 contains an exhaustive article setting forth the merits of the newly-discovered Bessonette method of baling cotton. This in itself should be a milestone in the march of progress towards a cheaper and more expeditious system, saving as it does, according to the figures of the author, from \$30,000,000 to \$40,000,000 annually to the planter, besides protecting the cotton more securely from loss by fire and waste, and being decidedly more modern in appearance than the antiquated, badly packed and many-sized apologies that now obtrude themselves upon us at every cotton platform in the country.

Another innovation which would save many millions every year, and must come eventually, is in the method of picking the cotton from the bush. This is a point seldom touched upon in discussions relative to the problem of cheaper production, but it is a vital one, and the adoption of machinery to supplement picking by hand is, in the writer's opinion, thoroughly practicable and a certainty of the future. Planters, as a class, are skeptical regarding the possibility of such an achievement, and even inventors themselves seem disposed to give the subject a wide berth, for, according to the patent-office records, there have been less than a dozen applicants for patents on cotton-picking machinery in the past five years, and while the majority of these machines proved failures when tested, one or two have been eminently successful, and have proven the thorough feasibility of the scheme. One machine, drawn by two mules and attended by two men, picked 452 pounds in fifty minutes, and it is estimated

that this machine when perfected will do the work of from forty to sixty hands, according to the size and uniformity of the plants. When this is accomplished the mists that now envelop the question of cheaper production will have begun to clear away, and planters will realize that, contrary to old Solomon's utterances, there is occasionally something new under the sun. As mechanical appliances which cheapened and expedited the handling of their immense crops have been the salvation of the grain-growers of the country, so now must the hand of genius stretch forth to the cotton planters and provide methods to supplant the primitive and expensive human labor, and thus enable him to become fortified against the continued overproduction and consequent low prices.

A. J. MITCHELL.

Cotton Outlook in South Carolina.

The Charleston News and Courier has obtained estimates on the quantity of fertilizer which will be used and the cotton acreage this year in the several counties of the State, and thus summarizes the situation:

"The recent rise in the price of cotton is having the expected effect on the many good resolutions made by the farmers two or three months ago that they would greatly reduce the acreage of the new crop. Our Greenville correspondent says that sixty days ago it would have been safe to say that there would be a reduction of 50 per cent. in the cotton acreage in the county, but cotton has advanced in price, 'and the old song is being sung that cotton is the only thing that will pay debts.' The result is that instead of reducing the cotton acreage 50 per cent., the reduction will not amount to more than 10 or 15 per cent. in Greenville county, and if the speculators would raise the prices a few more points and keep the market 'active with increasing demand for spot cotton' until the planting season is well over, we should not be surprised if the acreage will be larger than that of last year.

"The reports which we publish today from nearly all the counties in the State as to the probable acreage devoted to cotton-growing this year give a fair view of the situation. It is generally stated that there will be a reduction in the acreage devoted to cotton. The estimates vary widely. In some counties it will probably amount to 50 per cent.; in others the reduction will not exceed 10 per cent.; 25 per cent. would probably be a fair estimate for the State at large.

"But whatever the reduction in the acreage, it is certain that there will be a large decrease in production. The reports from all the counties agree that there will be a large reduction in the use of commercial fertilizers. In Aiken county, for example, it is reported that there will be a reduction of 25 per cent. in acreage and 50 per cent. in the use of fertilizers; in Anderson county 16 per cent. less cotton will be planted and 20 per cent. less fertilizers will be used; in Newberry county there will be 20 per cent. less cotton planted and 40 per cent. less fertilizers used; in Kershaw county it is reported that there will be a slight increase in cotton acreage and a greatly decreased production of cotton because of the falling off in the use of fertilizers. The situation is not as encouraging as it might be. But the weather has been so unfavorable that planting operations have been greatly retarded, and the prospects will doubtless improve. We regard the determination of the farmers not to use fertilizers as a great mistake of judgment. Cotton cannot be grown profitably at prevailing prices under the methods generally employed in this

State; it certainly cannot be grown profitably without the liberal use of fertilizers. One of the difficulties of our farmers is that they try to cover too much ground; they would make more clear money on a farm of 100 acres well fertilized than they can hope to make on 500 acres indifferently cultivated and fertilized. The small farmer who raises his own supplies at home and does not starve his land can make money; the big farmer with big store accounts and broad acres not fertilized is bound to lose money, and a great deal of it."

SOUTHERN COTTON MILLS.

Pen Pictures of Two which are Examples of the South's Progress in Textile Work.

A sample of the success attending the modern Southern cotton mill is found in the plant of the Graniteville (S. C.) Manufacturing Co. A correspondent of the Atlanta Journal, who recently visited Graniteville, brings out some very significant facts in his description of the industry, which was established in 1848, nearly fifty years ago. Despite this fact, however, the buildings are unimpaired, while the company is constantly putting in machinery of the most improved design to replace obsolete apparatus. The correspondent thus tells how it is done:

"As an example of the march of progress which the Southern cotton mills are stepping to at this time, I think a sight I witnessed in the Graniteville Mills is worth recording. It was in the cardroom. On one side of the room was an Englishman, many inches over six feet, putting up some new machinery of the most intricate type. 'This,' said the superintendent, 'is the latest English invention for a card machine patented in 1894. It cost us \$800 laid down in Boston. It will do the work better and three or four times as rapidly as our American machine which we have been working.'

"On another side of the cardroom I saw millmen smashing apparently good machinery with sledge hammers. 'This is what we do with old machinery,' continued the superintendent; 'we smash it to pieces, and then throw the pieces out of the window.'

"Is it not perfectly good—could you not sell it?' I inquired.

"There is no market for old machinery in the South. Every mill is equipped with the latest, and every successful mill lays aside a snug sum to snap up the new patents for the business which are constantly being made."

"The original investment in the Graniteville Mills was \$350,000. Its capital stock today is \$600,000, with no bonds, no preferred stock, no debt of any character. It has a surplus of \$680,000, and is now and has been for two or three years past paying regular semi-annual dividends of 5 per cent. Previous to the last few years the dividends were even higher, and ranged from 5 per cent. quarterly dividends to the present rate. The 10 per cent. dividends which are now being paid, or rather the 5 per cent. semi-annual dividend, which is considerably better, does not represent all the money made. On the contrary, a large sum is added to the surplus each year for the purchase of new machinery of the costliest, which means the latest and the best type.

"The two mills of the Graniteville Company consume 13,000 bales of raw cotton in round numbers annually, or the product of about 12,000 acres—about nineteen square miles of territory. Out of this 18,000,000 yards of cotton cloth is manufactured every year. In the mill there are 33,000 spindles, 115 looms and sixty-eight cards. The mills are hung for No. 18 to 23 yarns."

Referring to the employees, the corre-

spondent writes: "Unless appearances are very deceiving there is no more contented labor than is to be found in Graniteville. The company owns nearly all of the property in this town—one of nearly 2000 souls—as well as the land around Vacluse, on which a mill was erected out of the profits of the Graniteville Company."

"Mr. Tracy I. Hickman, the cashier of the company, and the superintendent, Mr. Rennie, took me over the grounds on which are the homes of the operatives to be found working in the two mills. Their houses are neat, comfortable and cheap. As an evidence of the cheapness, I was shown a splendidly-built six-room house which the Graniteville Mills rented to one of its employes for the sum of forty-nine and a half cents per week. The company permits no liquor to be sold on the property and a case of drunkenness is rare. The employees are paid the average scale of wages, but through the cheaper cost of living have a decided advantage over the mill operatives of the cities.

"A parallel for the vaunted savings of the New England mill hands is furnished at Graniteville for the operatives to have large bank accounts. Some of them have saved up \$5000 or more, and nearly all of them save something every month. The company pays \$1000 a year out of its earnings for the employment of a school teacher for the children of the operatives of the Graniteville Mill, besides furnishing them with a schoolhouse not excelled by the average public school in a large city. With the added amount which South Carolina furnishes each county for the education of children an excellent school system is established. One of the rules of the company is to allow no child to work in the mills until they have gone to school a certain number of years.

"The unprecedented demand for the product of Southern cotton mills is to be found in the offices of the Graniteville Company. 'We cannot keep up with the orders we have,' is the frank way in which they tell of the business being done by their mills. The product of these particular mills can be found in all parts of the world. China, Japan, the West Indies, the East Indies, Smyrna, Asia Minor, New England and Old England are furnished with the sheetings and drills made in Graniteville, S. C."

Textile Notes.

THE Saxe-Gotha Mill Co., of Lexington, S. C., noted last week as incorporated, will build a mill of 5000 spindles and 220 looms at Irene, S. C.

THE Collier Cotton Mills, of Hickory Grove, S. C., noted last week as incorporated, intends to build a \$100,000 plant. Mr. T. P. McDill is secretary.

THE Coosa Manufacturing Co., of Piedmont, Ala., is now at work on the foundation for a new engine-room to accommodate a 500 horse-power Corliss engine.

A CURRENT report states that Mr. W. S. Harvin is making preparations to build a knitting mill at Manning, S. C. The plant is to be capitalized at \$50,000.

A REPORT from High Point, N. C., states that Mr. H. F. Smith, of Philadelphia, Pa., has been visiting High Point, and contemplates building a cotton mill there.

MR. T. J. KILLEBREW, manufacturer of woolen jeans and cotton yarns, is rebuilding his dyehouse, dryhouse, engine-room, etc., with brick, which was formerly of wood.

REFERRING to the new mill project at Chattanooga, Tenn., Messrs. Vance & Kirby write the MANUFACTURERS' RECORD that they have leased their cotton mill to the W. A. Steers Co.

THE directors of the Harmony Grove Cotton Mills, of Harmony Grove, Ga., met in regular meeting last week and voted to order sixty more looms at once. This will then give the mill 145 looms and a capacity

of 8000 yards or more per day. This will then enable the company to fill many of its increasing orders.

It is proposed to organize a cotton-mill company at Cullman, Ala., and a meeting has been held to further the project. A stock of \$50,000 is proposed, and subscription books are now open.

THE Chamber of Commerce of Huntsville, Ala., is considering a proposition from a well-known Eastern company for the location of a cotton mill in Huntsville. The plant proposed would employ 500 operatives.

THE stockholders of the proposed Mills Cotton Mill at Greenville, S. C., have chosen site for the plant, and will at once draft a charter and apply for incorporation. It has been decided to install an equipment of 10,000 spindles and looms to suit, and work on the plant is to commence very soon. O. P. Mills is the prime mover in this enterprise.

THE proposed \$100,000 cotton factory at Winston, N. C., is now assured. It will be erected at once by the South Side Manufacturing Co., noted last week. The stockholders of the company met last week and elected a board of directors composed of J. W. Fries, A. H. Eller, H. E. Fries, C. A. Reynolds, E. A. Ebert, John C. Spach and Chas. R. Makepeace, of Providence, R. I.

THE annual meeting of the stockholders of the Union Springs (Ala.) Cotton Mills was held on April 2. The same directors were re-elected for the ensuing year, viz.: B. T. Eley, S. T. Froz, C. H. Franklin, J. D. Norman, J. H. Hainer, Sr., W. E. Pierce, N. P. Banks, W. M. Stakely, Sr., and L. Sessions. At the directors' meeting Dr. C. H. Franklin was re-elected president, and J. H. Rainer, Jr., was re-elected secretary and treasurer. The mill is reported on a good paying basis. Besides routine business the meeting ordered that the 8 per cent. bonds, amounting to \$40,000, be recalled, and \$35,000 of 6 per cent. bonds be issued instead.

LAST week the Trenton Cotton Mills, of Gastonia, N. C., held the annual meeting of stockholders. The principal business was the consideration of the reports of the secretary and treasurer and the election of officers. Re-elected: J. L. Falls, president; G. W. Ragan, secretary and treasurer; G. A. Gray, superintendent. Maj. R. T. Harper was named as bookkeeper. Directors were elected as follows: J. L. Falls, G. W. Ragan, Geo. A. Gray, H. F. Forbes, L. L. Jenkins. The report of the secretary and treasurer was a very gratifying one. The mills were able to declare a dividend of 10 per cent. to the stockholders, besides passing a handsome sum to surplus.

THE Scotland Neck (N. C.) Cotton Mill, which manufactures knit goods exclusively, principally underwear and hosiery, has entered on the sixth year of its successful career. Scotland Neck is situated in a section of rich agricultural lands in Eastern North Carolina. This mill is an illustration of what could be done in many other towns in that State, and, indeed, throughout the cotton States, and what is being done by the textile plants. The original capital stock was \$37,600, upon which a dividend of 10 per cent. was declared and paid the first year. Since then the profits have gradually increased, but, instead of being paid out to stockholders, have been expended in enlarging and improving the plant until the capital represented is \$60,000, upon which, even in these hard times, the mill is earning a handsome dividend. The management is in the hands of Mr. A. McDonald, a thoroughly practical and energetic man, to whose efficiency and devotion the success of the mill is doubtless due. One hundred and forty persons are employed at present, but the force will shortly be increased to 160.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

New Cottonseed-Oil Patents.

TEXAS COTTONSEED CRUSHERS' ASSOCIATION
DALLAS, TEXAS, April 4.

Editor Manufacturers' Record:

I am pleased to report that there are two very important inventions about to be added to the oil-mill business.

The first is a patent process of Mr. R. G. Laddling, of Brownwood, Texas, and Mr. Lee Baggett, of Farmersville, Texas, joint inventors. It is claimed for this process that prime crude can be refined into prime summer yellow without any perceptible loss. The inventors claim that they have a process whereby they can take the coloring-matter out of the crude oil without precipitating the soap-stocks, as done by the old process of refining; and as both of the inventors are known to be expert refiners, the claims of their process are attracting no little attention among the oil-mill men of this section, for if it is the success that they claim it is, it means a saving of 3 to 6 per cent. on all prime crude oil, which, of course, must be refined before it can be used.

The other invention, which is equally important, is a patent apparatus for cooking cottonseed meal, the inventors being Mr. W. I. Yopp, of Dallas, Texas, and Dr. B. Dabney, of Bonham, Texas, joint inventors, which contemplates the cooking of cottonseed meal in transit in conveyors running through a steam boiler, conveyor tubes of said boiler to be submerged in water. The inventors claim that by this process the meal can be cooked with a low degree of heat; and the vessel containing same being submerged in water, it will be utterly impossible to scorch the meal for the same reason that it is impossible to scorch oatmeal or rice cooked in a double boiler, so that the meats so cooked will make a much brighter oil and cake and more of the oil, there being absolutely no waste of steam. The inventors propose that the boiler be built in the same battery with the ordinary steam boilers, the meal passing through same in circuits, and thus going back and being discharged into the evaporating vessel or sub-heater in the pressroom.

The claims of the patent as shown by the files of the patent office, serial No. 502,752, are in detail as follows:

1. The combination with a steam boiler of a conveyor tube and conveyor entering the boiler at one end, an interior chamber contiguous to the soot chamber and containing the inner bearing for the conveyor, and a door into said interior chamber from the soot chamber, substantially as and for the purpose set forth.

2. In an apparatus for cooking cottonseed meal the combination of a boiler having an end-extension or neck extending from the boiler proper to the furnace wall, and a meal conveyor entering said boiler within the extension or neck and arranged below the water-level, substantially as set forth.

3. In an apparatus for cooking cottonseed meal the combination of a boiler having a lateral extension or neck extending from the boiler proper to the furnace wall, a meal conveyor entering the boiler through said extension or neck, together with the discharging conveyor passing out through the same, substantially as and for the purpose set forth.

4. In an apparatus for cooking cottonseed meal the combination of a boiler having a lateral extension or neck extending from the boiler proper to the furnace wall, a meal conveyor entering the boiler through said extension or neck, together with the discharging conveyor passing out through same, with a supply feeder for the

first conveyor and an evaporating vessel adapted to receive the meal discharged from the other conveyor, substantially as and for the purpose set forth.

I give you this information, as it will doubtless be of considerable interest to the oil-mill people throughout the country.

R. K. ERWIN, Secretary.

The Market for Cottonseed Products.

NEW YORK, April 9.

The cotton-oil market has not receded from the position it held at date of last report, but may be said to be firmer. A hopeful event may be recorded in the announcement that England has advanced the price of home-made refined, thus directly encouraging importation of the American off-grade yellow, while Germany has evinced practical interest in white oil by the purchase of fair supplies for prompt delivery on a 30-cent basis. The numerous enquiries from England for good off-grade yellow has tended to stiffen the price of that commodity, for which 26 cents is asked and conceded. The prime variety of summer yellow is quoted at 26½ cents and choice lots 27 cents, at which latter figure several parcels changed hands. The price of barrelled crude remains unchanged at 23 to 24 cents for prime and choice, respectively. Movements of crude in bulk from the mills are limited, the bids not harmonizing with the views of holders. The languishing condition of the compound-lard trade here, and more particularly in the West, is the primary cause of the passing dullness. The declining tallow market is attracting the attention of the soapmakers to the disadvantage of the oil. Mississippi Valley oil is quoted at 21 cents, Atlantic States oil at 20 cents, while Texas oil is quoted at 19 cents. A reference to last week's quotations as compared with those of this date will disclose the fact that the values of choice, prime and off-grade summer yellows have materially advanced. Trading on the whole, however, has been light, with regard to exports especially. White oil is on offer at 31 cents, refiners increasing their stocks to meet the anticipated demand from Germany. Active enquiries for summer yellow for May delivery—26½ cents offered—meets with few acceptances on the part of holders. Current quotations at this market are as follows: Crude, prime, 23 to 24 cents; off quality, 21 to 22 cents; prime yellow summer, 26½ to 27 cents; butter oil, 28 to 29 cents; summer, off grade, 25½ to 26 cents; white summer, 30 to 31 cents; yellow winter, 33 to 34 cents; white winter, 35 to 37 cents; soap stock, 1c. per pound. Sales reported for the week aggregate 40,000 gallons prime yellow, 26 to 27 cents; 50,000 gallons choice at 27 cents, and 42,500 gallons off-grade at 25½ to 26 cents.

Cake and Meal.—A fair demand for export obtains, and at prices ranging from \$14 to \$18.50 per ton, as to location, the latter quotation referring to New Orleans loading. American cotton cake of best make is quoted on the London and Liverpool markets at £5 per ton, as compared with £3 7s. 6d. per ton of the London-made undecorticated variety, the provincial brands being in some instances 5s. per ton less. The extensive manufacture of a compounded feeding-cake, composed of certain proportions of linseed, cottonseed and rice meal, together with ground locust beans, in the various English manufacturing centres, has proved a serious hindrance to the distribution of oilcakes generally. Mills are operated especially for the manufacture of this variety of feeding-cake. The modus operandi consists in thoroughly mixing certain proportions of the reduced materials in an ordinary steam-jacketted kettle and sufficient steam injected to form a pulp, in which condition it is withdrawn, and suitable pressure applied in a specially-constructed hydraulic press to form a cake. As the latter operation is for the purpose of producing the commodity in the convenient

form of cake, and not for the extraction of oil, a light application of pressure only is needed.

Cottonseed-Oil Notes.

At the regular monthly meeting of the directors of the American Cotton Oil Co., held in New York on the 2d inst., J. Kennedy Tod, of J. Kennedy Tod & Co., and William Barber, of the Barber Flax & Thread Co., were added to the board. The reports of the American Cotton Oil Co.'s business shows that it has earned for the fiscal year to date more than the proportion for that period of the interests on the company's bonds, sinking-fund requirements and dividend on its preferred stock.

Texas Serpentine Stone.

LLANO, TEXAS, April 4.

Editor Manufacturers' Record:

On March 8 I formed a company of Houston capitalists to work my serpentine stone quarries in Llano county. The capital is \$20,000. I have now good sound blocks of serpentine quarried. Some of the blocks are eight feet long. I have three distinct varieties. I am just getting ready to ship one car of rough blocks to St. Louis, to have them sawed up into slabs and polished.

The deposit is a mile long and, on an average, 1800 feet wide. I have opened the quarry in three different places, and the whole mountain seems to be solid with mica veins running between ledges. I am satisfied that I have the most extensive serpentine deposit in the United States, if not in the world. My quarry is eight miles from Llano, on the finished grade of the Aransas Pass Railroad. There is an immense deposit of serpentine alongside my serpentine deposit.

The city engineer of Munich has made a street-paving brick of crushed serpentine with which the streets of Munich are paved. It is the best street-paving brick so far in use. The crushed serpentine is mixed with a binding substance and burned in a china kiln. The brick so made is stronger than granite, flexible, as a blow from a heavy hammer will dent it, and on account of the uneven composition of serpentine it leaves a rough surface, so that the horse's feet cannot slip. I wrote to the mayor of Munich, and in due time the following answer came from the engineer:

"Can your serpentine be shipped easily from Llano to any part of the world? Have you any fire-proof material to make kilns? If you can answer the above satisfactorily you have a fortune."

I would like to know the binding substance used in the composition, and I will be very much obliged if you can give me some information. So far I have used nothing but a derrick, but soon I shall need a saw, polisher and an engine, and if I can make bricks well I need a lot of machinery.

N. J. BADU.

IN future Mr. C. B. Orcutt, of New York, will represent the interests of West Virginia coal operators in the Chesapeake & Ohio Railroad district in the North, and will also care for the vessel trade, while Mr. J. W. Hopkins will act as inland agent for Virginia and adjacent territory. The reputation of these gentlemen for executive ability guarantees that the operators' interests will be well cared for.

SECRETARY MULVEY says the subscriptions to the Portsmouth (Va.) Cotton Manufacturing Co. have been used as fast as received, that \$26,000 have been expended in erecting the buildings and \$4000 for land, and that the equipping of the mill will cost about \$70,000 more. To secure this amount the directors expect to bond the property for \$50,000. The plans for the equipping of the mill are ready. Different propositions have been offered to lease the mill, but not accepted as yet.

PHOSPHATES.

The Future of Fertilizers.

By A. D. Ledoux, Ph. B.

Fertilizer manufacturers are at present very much concerned as to the ultimate outcome of the battle that is being waged with low prices. The good old times of large profits have long since gone, and the shrinkage that has gone on for years has now reached a point which is indeed alarming.

We find several reasons for the general depression in this trade. The hard times which has spread over the country has little if anything to do with it. The main reason we find in too many works having been built, and in overproduction of the principal crops. Every one remembers the great amount of cotton raised some three years ago, the following low prices, the restriction in planting this article the next year, the subsequent rise in value, and again excessive planting, and the low value of the present time. Now, while the very rapid development of the South has placed more land in cultivation and opened up vast tracts which but a short time ago were in a wild and uncultivated state, this rapid growth has not kept pace with or been in the proportion to the manufacture of fertilizers. We now have oil mills and small fertilizer works at almost every crossroad, and the great centres are feeling the loss of business.

The overproduction of the article is caused mainly by Texas. The growth of the farming of cotton has been most wonderful in the Lone Star State. With lands requiring no fertilizer or manipulation save the ordinary farm methods, they yield crop after crop with little apparent exhaustion. The result of this has been that the usual market supply has been augmented by a very large and constantly increasing supply from a quarter that in the past has not troubled the East.

These facts being plain, it leaves the farmer and the fertilizer man with the very serious question before them, "What are we to do?" The Texas man can be left out of the question, for with little if any fertilizer to buy, he can well stand the low prices; but the cotton-raiser on the seaboard, compelled to fertilize his lands for every crop, has a knotty problem before him.

As we are not discussing the situation of the farmer, it will be sufficient to say that his true course seems to lie in not confining his planting to one crop, as is the rule, but to so arrange his work that he may have at least two strings to his bow. It is also too much the custom to put the entire land and means into one crop, or I will say a market crop. This is not wise; for if sufficient potatoes and corn were planted for use during the winter, and enough hogs raised for the same purpose, a man could afford to lie back and wait for better prices. By this means he would not have to mortgage himself body and soul to the storekeeper in order to exist.

Now, as to the fertilizer manufacturer, he surely is traveling a hard road. While the price of his finished goods has fallen continuously, the price of the most expensive raw materials has remained the same, or changed but little. In addition to this, the railroad freights, which were made at a time when profits were fair, has remained the same, and it costs as much now as in better times to distribute the goods.

What, then, is to be done? With restriction in sales and low prices, there is but one course for the manufacturer to adopt. He must make his goods cheap, and make them appreciated in the field. He cannot buy his raw material any cheaper, nor can he adulterate them, but he must so manufacture that he will produce them cheaper. He must adopt the most modern methods, both as to machinery and manipulation

He must reduce his labor bill by every possible means. It will not do to go plodding along in the old ruts, but skill and ingenuity must be brought to bear on the question. The factory is not the only place where the desired results are to be obtained. The office also must work to the same end. The manager must not send to the factory any class of goods that may be bought cheaply, but the work which the machinery will do must be considered, and a material which is twenty-five to fifty cents cheaper than some other may not be the cheapest in the end. Aside from cheap production, a factor which will work most strongly for success will be the production of goods which will give the best results in the field. It is too common with very many manufacturers to think that all that is necessary is to give the guarantee printed on the bags, and that the crop will then be a good one. The man who thinks this way will find that he will be one of the first to go to the wall, and he will wonder why his neighbor was successful. The nature of the soil to be fertilized must be taken into account, and the needs of the crop must be considered. Some materials will be too quick and some too slow; some will produce better cotton, tobacco or corn, and the successful man will be the one who properly combines the raw materials into the fertilizer which will do the best on this or that particular soil. In a word, success depends on two principals—modern manufacture and intelligent choice of raw materials properly compounded.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, April 11.

There is no improvement reported in the general phosphate market, and business continues quiet, with little or no demand at the moment. Manufacturers are not purchasing at present in any quantity, and orders are generally light. At points of production, both in South Carolina and Florida, there is very little snap or vigor to the market, and the demand, both domestic and foreign, is very light. South Carolina rock is quoted \$3.25 for crude, \$3.75 to \$4.00 for hot-air-dried and \$6.50 for ground rock, all f. o. b. Charleston. Florida rock is nominally steady at \$3 to \$3.25 for river pebble and \$4.25 to \$4.50 for land rock, all f. o. b. Tampa or Punta Gorda. The only local charter reported during the past week was the schooner C. S. Glidden to load phosphate at Tampa for Baltimore. In New York, berth freights for Europe are quiet, with rates nominally steady. Among the phosphate charters reported during the week was a schooner, 643 tons, from Charleston, S. C., to Philadelphia at \$1.90, coal out 70 cents.

FERTILIZER INGREDIENTS.

The market is generally quiet, with a moderate inquiry for ammoniates. The demand for sulphate of ammonia and dried blood is slightly improved. There is considerable inquiry for fall business, but the actual volume of sales are light. Prices throughout the list are generally firmer, with buyers and sellers apart in their views. Nitrate of soda is in better request and a shade firmer.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	3 25@	\$3.30
Sulphate of ammonia, bone.....	3 20@	—
Nitrate of soda.....	1 75@	—
Hoof meal.....	1 50@	—
Blood.....	1 90@	1.95
Azotine (beef).....	1 80@	—
Azotine (pork).....	1 80@	—
Tankage (concentrated).....	1 70@	—
Tankage (9 and 10).....	1 75	and 10
Tankage (7 and 30).....	17 00@	17.50
Fish (dry).....	22 00@	23.00
Fish (acid).....	15 00@	15.50

CHARLESTON, S. C., April 8.

Business in phosphate circles continues dull and mostly confined to foreign and coastwise shipments, little local movement being noted. Most of the mills are shut down, ending up the season's shipments of fertilizers and preparatory to the beginning

of another year's work. The river companies all report active development and mining full force, their European trade continuing steady. Prices are about \$3.25 for crude, \$3.75 to \$4 for hot-air-dried and \$6.50 for ground rock, f. o. b. Charleston. The shipments by water were Elmiranda, 900 tons for Carteret; Rob Roy, 1000 tons for Carteret; H. J. Blendenmann, 650 tons for Booth Bay; while in port and loading are the E. C. Middleton and C. L. Godfrey. The shipments by water since September 1 were 54,044 tons crude and 13,65 tons ground rock, against 69,711 tons crude and 300 tons ground rock.

Phosphate and Fertilizer Notes.

THE British steamship Para has been chartered to load phosphate at Brunswick, Ga., for Memel.

THE Norwegian bark Ambassador cleared from Jacksonville, Fla., on the 4th inst. for Honolulu with 1003 tons of phosphate.

THE steamship Inverness cleared from Savannah last week for Giencken with 1455 tons of phosphate rock among her cargo.

A SPECIAL from Bartow, Fla., states that the Palmetto Phosphate Co. tried its dredge last week, and will be ready to commence active mining about the 20th inst. This plant has been under construction about ninety days, and is one of the most complete and well appointed in the State.

A SPECIAL from Fernandina, Fla., states that owing to the early arrival of the British steamship Kingsdale, which was advertised as the first ship of the Barber & Co.'s Fernandina and Hamburg Line to sail from the former port, was loaded with phosphate and went to sea March 31. The steamship Cundall took her place and sailed from Fernandina on the 5th inst.

MESSRS. J. M. LANG & CO. report the shipments of high-grade phosphate through the port of Savannah for the month of March as follows: 7th, steamship Dora Foster for Genoa with 1144 tons by the Anglo-Continental Guano Co.; 9th, steamship Britannic for Stettin with 1505 tons by C. Thalheim, and steamship Murthana for Bremerhaven with 1312 tons by B. Arentz & Co.

THE phosphate shipments from the port of Charleston, S. C., for the week ending April 5 were as follows: Schooner Warwick for New York with 820 tons; schooner Edna for Philadelphia with 500 tons and steamer Yemassee with 500 bags of ground rock; barkentine Elmiranda for Cartaret, N. J., with 930 tons; schooner H. & J. Blendenmann with 840 tons, and schooner Fanny Reiche for Norfolk with 640 tons—total 3730 tons of crude and 500 bags of ground rock.

MR. K. B. HARVEY, deputy collector of the sub-port of Punta Gorda, Fla., reports the shipments of phosphate from that port during the month of March as follows: 4th, schooner J. N. Bird for Baltimore, 1224 tons, Foote Commercial Co.; 5th, steamship Leaconfield, 2900 tons for St. Louis-de-Rhone, Comer, Hull & Co.; 7th, steamship Duffield for Hamburg, 2400 tons, Peace River Phosphate Co.; 14th, steamship Hartville for Hamburg, 1941 tons; 21st, steamship Cordova for Stettin, 2980 tons, and 28th, steamship City of New Castle, 2613 tons for Riga, Russia, shipped by the Peace River Phosphate Co., Consolidated—total for the month 14,058 tons, of which 1224 tons were domestic and 12,834 tons were foreign.

THE phosphate shipments from the port of Tampa, Fla., for the month of March, although not as large as the corresponding month of 1894, were better than usual. The total shipments for the month amounted to 16,600 tons, against 19,555 tons for March, 1894. The shipments for March were distributed as follows: Steamship Marion, 2500 tons for Hamburg,

Anglo-Continental Guano Works; steamship Fernland, 2700 tons for Hamburg, Anglo-Continental Guano Works; steamship Oaklands, 2400 tons for Rotterdam, Associated Phosphate Co.; steamship Sybil, 2250 tons for Hamburg, Land Pebble Phosphate Co.; steamship Texan for Rotterdam with 2450 tons, Anglo-Continental Phosphate Co.; steamship Crete, 1800 tons for Hamburg, Anglo-Continental Phosphate Co., and steamship Glemorren for Hamburg with 2500 tons, Florida Phosphate Co.

THE phosphate business at the various Florida ports is beginning to expand in volume, and the foreign demand shows up better than for some time past. During the month of March the shipments fell a little short of what was expected, on account of the non-arrival of several large steamers to take their cargoes, which would have been included in the business of that month. The total shipments of phosphate for the month of March amount to 13,294 tons. The shipments for April, it is stated, will amount to at least 20,000 tons, and will be handled as follows: British steamship Macedonia, 2100 tons, Dunnellon Phosphate Co.; steamship Cundall, 3300 tons, C. Thalheim; steamship Ripon City, 2700 tons, A. Neuman; steamship North Flint, 2800 tons, A. Neuman; steamship David Mainland, 2500 tons, B. Arentz & Co.; steamship Glanyswith, 2500 tons, French Phosphate Co.; steamship Glenhafren, 2500 tons, French Phosphate Co., and two steamships which will take about 4500 tons, the names of which are not yet known. The steamship Macedonia sailed on the 3d inst. for Stettin, Germany, with 2100 tons.

The South and West Congress.

The South and West Grain and Trade Congress, which has just adjourned at Mobile, Ala., promises to accomplish much good in diverting the export trade of the West to its proper seaboard shipping points—the South Atlantic and gulf ports. Readers of the MANUFACTURERS' RECORD are familiar with the first congress held at Wichita, Kans., about a year ago. The interest then aroused has been augmented with the result that ten States were represented at the Mobile gathering. N. B. Thistlewood, of Cairo, Ill., was appointed chairman, and vice-presidents selected as follows: Alabama, Gaston A. Robbins; Florida, S. R. Mallory; Georgia, A. W. Smith; Louisiana, Robert McMillan; South Carolina, John Reeves; Mississippi, A. J. Russell; Nebraska, L. P. Young, and Indiana, E. Coghill.

Resolutions were read as follows: Indorsing the project of a canal across the peninsula of Florida; to memorialize Congress as to the importance of the speedy completion of the Nicaragua Canal; urging on the national authorities the importance of the speedy inauguration and completion of a navy-yard at New Orleans.

The congress appointed a permanent committee to stop discrimination against Southern points in favor of Eastern points. It was also resolved that each city in the South should organize a bureau of transportation to assist the transportation committee in the performance of its duties. The chair appointed on said committee the following: John A. Smith, S. R. Mallory, W. A. Matthews, A. J. Vanlandingham and W. T. West. A resolution was also adopted advocating that the Southern and Western importers give the preference to Southern ports in order to provide return tonnage for transportation; also a resolution in behalf of direct trade.

The session in 1896 will be held in Charleston, S. C.

A STEAMER line between Chattanooga and St. Louis has been established. The steamer City of Chattanooga recently left St. Louis with 575 tons of freight consigned to Chattanooga and points on the Tennessee river.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on pages 172 and 173.]

Lumber Directory.

Readers of the MANUFACTURERS' RECORD who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

LUMBER MARKET REVIEWS.

Baltimore.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, April 11.

The week under review has been quiet in almost every avenue of the local lumber market, and the volume of business only moderate. Receipts of yellow pine have been quite heavy during the week, and the demand has been slightly better for various grades. Boxmakers and planing-mill men are buying more freely, while there is also some demand for building purposes. Cypress is quiet, with prices steady. In white pine the market is unchanged, with prices firm for all desirable grades. The hardwood market has shown no material change and the movement is generally light. There is very little demand from local buyers, and the principal business is from out-of-town trade. There is a fair export demand and prices are steady. The reports from the various European centres are more favorable and stocks are somewhat reduced. The various wood-working concerns throughout the city report business as somewhat improved. Planing mills are enjoying a better business and orders coming in more freely.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE.	
5-4x10 No. 3, kiln dried	\$15 50
5-4x10 No. 2, " "	17 50
4-4x10 No. 1, " "	16 50
4-4x10 No. 1, " "	17 00
4-4 narrow edge, No. 1, kiln dried	13 50
4-4 wide edge, " "	18 00
6-4x10 and 12, " "	23 00
4-4 No. 1 edge flooring, air dried	14 00
4-4 No. 2 edge flooring, " "	11 00
4-4 No. 1 12-inch stock, " "	15 00
4-4 No. 2, " "	12 50
4-4 edge box or rough wide	9 50
4-4 " (ordin'y widths)	8 50
4-4 " (narrow)	7 00
4-4 12-inch	10 50
7-4 narrow edge	6 50
7-4 wide	7 50
7-4 10-inch	8 50
Small joists, 2-1/2-12, 14 and 16 long	7 50
Large joists, 3-16 long and up	9 00
Scantling, 2x3-16 and up	8 00
WHITE PINE.	
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4	48 00
3d clear, 4-4, 5-4, 6-4 and 8-4	43 00
Good edge culls	14 00
Good stock	16 50
CYPRESS.	
4-4x6, No. 1	20 50
4-4x6, No. 2	14 00
4-4x6, 16 feet, fencing	11 50
4-4x6, rough	9 50
4-4 rough edge	9 00
4-4 edge, No. 1	18 00
4-4 No. 2	12 00
Gulf, 4-4, Nos. 1 and 2	28 50
Gulf, 6-4, Nos. 1 and 2	31 00
HARDWOODS.	
Walnut.	
5-8, Nos. 1 and 2	65 00
4-4, Nos. 1 and 2	50 00
5-4, 6-4 and 8-4	85 00
Newell stuff, clear of heart	85 00
Culls	20 00
Oak.	
Cabinet, white and red, Southern, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long	29 00
4-4	33 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4	53 00
Culls	10 00
Poplar.	
Nos. 1 and 2, 5-8	24 00
" 4-4	28 00
Nos. 1 and 2, 6 and 8-4	32 50
Culls	13 00
SHINGLES.	
Cypress, No. 1 hearts, sawed, 6x30	7 50
No. 1 saps, sawed, 6x30	5 50
No. 1 hearts, shaved, 6x30	6 50
No. 1 saps, shaved, 6x30	5 00
LATHES.	
White pine	2 65
Spruce	2 15
Cypress	2 15

Charleston.

[From our own Correspondent.]

CHARLESTON, S. C., April 8.

The demand for lumber during the past week has improved, and the market is fairly active, with prices steady under a fair inquiry. The milling sections adjacent to the city report orders as coming in more

freely, with prices much firmer for all desirable grades of lumber. The market for crossties is improving, and there has been several orders filed this week. Prices of lumber do not seem to advance, but quotations are firm at the following figures: Merchantable, \$14 to \$16 for city-sawed, \$12 to \$14 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft. Dock timber is quoted \$4 50 to \$6 50; shipping, \$8 50 to \$10 50. Shingles are firm, with a good demand at \$5 to \$7 per thousand. The New York shipments of lumber during the past week were as follows: Schooners Florence Shay, 230,000 feet; Erastus Wiman, 623,600 feet; Georgette Lawrence, 250,000 feet; Florence Leland, 294,000 feet; Napoleon Boughton, 675,000 feet; Centennial, 470,000 feet, and by steamers 318,000 feet. The steamship Vemassee cleared for Philadelphia with 800 staves, 2008 crossties and 54,000 feet of lumber among her cargo. The total shipments of lumber since September amount to 39,509,478 feet for domestic ports and 771,123 for foreign, making a grand total of 40,280,601 feet, against 30,012,563 feet for the corresponding period last year. The freight market is steady, with rates not materially changed. A charter was reported in New York on the 6th of a schooner, 778 tons, from Charleston to New York at \$4.62 1/2, and 44-foot ties at 14 cents.

Pensacola.

[From our own Correspondent.]

PENSACOLA, FLA., April 8.

The volume of business in lumber and timber at this port for the month of March presents a very favorable showing, and the general trade, as shown by the report of the collector of customs, was much above the average. The movement in timber has been quite active, and shippers are in somewhat better spirits, as the European demand shows some signs of improvement. During the month of March there was entered at this port thirty foreign vessels of 24,566 tons, five American vessels of 3081 tons, and from coastwise ports sixteen vessels of 35,547 tons. The clearances for foreign ports were thirty-nine foreign vessels of 31,920 tons, one American vessel of 330 tons, and for coastwise ports eighteen vessels of 7593 tons, making the total of fifty-eight vessels of 39,843 tons. The exports to foreign ports were 44,503 cubic feet of hewn timber, 10,729,000 superficial feet of sawn timber, 11,028,000 superficial feet of lumber, and miscellaneous 23,699 feet, the whole valued at \$253,109. The coastwise exports were 1,766,000 superficial feet of lumber. During the current month there has been a fair demand for lumber and timber, while prices continue very steady for all desirable material. The volume of business in lumber and timber at this port is expanding and the shipments increasing, while at present the amount of business is considerably above last season's trade. The firm of H. Baars & Co., of Pensacola, is, without doubt, the largest exporter of pitch pine in the United States, and its shipments from September, 1893, to September, 1894, aggregate 126,050,211 feet of timber and lumber. The movement during the past week has been fairly active, and the clearances amounted to 2323 cubic feet of hewn timber, 2,653,000 superficial feet of lumber and 3,400,000 superficial feet of sawn timber. The charters reported in New York this week were as follows: A British steamer, 1205 tons, Pensacola to Rotterdam with sawn timber at 100/; a British steamer, 1585 tons, Pensacola to United Kingdom with timber on private terms, and a foreign ship, 1600 tons, from Pensacola to United Kingdom or Continent at 90/.

Mobile.

[From our own Correspondent.]

MOBILE, ALA., April 8.

There is no improvement in the lumber and timber market here, and the same con-

ditions prevail as reported a week ago. Timber continues to go out, while prices are away down to rock bottom, and buyers are offering for lumber and timber just what the mills are paying for logs. Hewn timber, when placed upon the market, will bring about 11 to 11 1/2 cents per cubic foot for 100 feet average and classing B1 good. Hewn poplar is steady at 11 to 12 cents. Sawn timber is dull at 10 to 10 1/2 cents per cubic foot, basis of forty feet average. Saw logs are dull and lower at \$5 to \$7 per 1000 feet. Cypress is dull at 6 to 8 cents per cubic foot. There is a limited demand for poplar at 8 to 9 cents per cubic foot. The shipments of timber were 28,734 cubic feet of sawn and 9582 cubic feet of hewn for Bord-aux, France, and 93 285 cubic feet of hewn for Liverpool. The demand for lumber has been fairly active, and prices still show a narrow margin of profit. Among the clearances were 352,094 feet for Bordeaux, France. The bark Fanteel cleared for Montevideo with 437,830 feet, and the bark Bahama for Port of Spain with 300,000 feet. The schooner Schmidt cleared for Sagua, Cuba, with 250,000 feet, and the schooner Crisis with 190,575 feet for Laguna, Mexico. The total clearances for the week aggregated 1,835,336 feet, and since September 1 they amount to 30,023,665 feet, against 40,778,838 feet for the corresponding period last year. Freights are steady, with a moderate offering of tonnage. To the West Indies the rates are \$5 50 to \$6 per thousand, and coastwise \$5 50 to \$6. A charter was reported in New York on the 5th of a schooner, 213 tons, from Mobile to New York at \$5 75. Timber to the United Kingdom is quoted at 27s. to 29s. per load for hewn, and sawn 90s. to 95s. per standard.

New Orleans.

[From our own Correspondent.]

NEW ORLEANS, LA., April 8.

The general outlook for a good volume of business in lumber and timber this spring and summer is regarded here as more encouraging. The recent labor troubles have not affected the timber market as a rule, and there is at present a very fair export business in progress, while the local trade is also in a healthy condition. The sash, door and blind factories, as well as all woodworking concerns, have all the business they can handle at the moment, and at prices showing some improvement. The demand for yellow-pine and cypress lumber is increasing every week, and all advices from city and country milling districts are most flattering as to output and demand. Of course, prices are not appreciating as fast as could be desired, but the general tone of the market is more decided, and prices firmer under an active demand. There is at present a very active business in lumber and timber on the New Orleans & Northeastern division of the Queen & Crescent system, and all the saw mills are actively engaged filling orders, with very little surplus stock on hand. At Slidell, La., Glades, Poplarville, Orrisburg, Lumberton, Richburg and Hattiesburg, Miss., the saw mills are now doing a heavier business in the lumber trade than has been done for some months. Nearly all the mills are pressed with orders for prompt delivery, and shipments are made with as quick despatch as conditions permit. The saw mills of Southwestern Louisiana are also fully engaged, and are loaded with sawing orders for planer stuff at an advance in prices. The yellow-pine situation is regarded as a healthy one, and is constantly improving, while the mills are generally improving the manufacture of all grades and dimensions of stuff. The local building demand is absorbing considerable material, and there are a number of warehouses, factories and private residences in course of construction and projected which will give employment to

mechanics and others. An important real-estate transaction was consummated last week. The building No. 50 and 52 Baronne street was sold by Messrs. Curtis and Bumgarner to the New South Building & Loan Association for the cash consideration of \$35,000. The New South will erect a handsome structure on the site procured at a cost of about \$50,000. It is stated that New Orleans is to have a packing-house, and the plant of the defunct People's Slaughter-House & Refrigerating Co., in the third district, is being rapidly converted into a packing-house with all modern appliances. Mr. Henry Loewenstein, of Cincinnati, who is at the head of the enterprise, thinks there is a fine field for a first-class concern, and the company intends to make this the best and largest south of Louisville. The officers of the company are Henry Loewenstein, president; S. D. Jackson, vice-president; Daniel W. Loewenstein, manager; Charles E. Levy, treasurer, and James L. Lemerrie, secretary.

Beaumont.

[From our own Correspondent.]

BEAUMONT, TEXAS, April 8.

There is a decided change in the lumber situation in this section of the State, and both the demand for and prices of lumber are much improved. Manufacturers are very firm as a rule in their demands, and adhere strictly to list prices. All grades of yard stock have been advanced, and there is a disposition on the part of millmen to get prices up to a living profit. Orders for timber at prices ruling heretofore have been refused, and on all bills submitted for figures a decided advance has been quoted. The shingle situation is also much improved within the past few weeks, and prices have been advanced about 10 per cent. The supply of shingles is limited, and with a fairly active demand there is no trouble in getting the advance. At Orange business has been transacted under the new price-list which was adopted at Lake Charles, La., on the 27th ult. At that meeting it was determined to withdraw the old price-list and replace it with a new one on which all yard stock is to be marked up from 25 cents to \$1 per thousand. The effect of the new price-list has been to curtail the number of orders during the latter part of the week, though many inquiries have come to hand. At Orange every class of yard stock in pine is in full supply, while there is some cypress lumber held, but in broken lots. There will be quite a large attendance from Beaumont at the Texas Lumbermen's Association, which is to be held in Fort Worth tomorrow. The Kaysee road, extending north through the pineries for a distance of fifty-five miles, is likely in a short time to develop into a timber road equal to the Sabine & East Texas. Two or more mills have already been contracted for and sites selected. One of these mills is to be located at Silsbee, and will be operated by the Texas Pine Land Association. Another mill will be put up at Kirbyville, the present terminus of the road. The Beaumont Lumber Co. is building an extensive shed to its planer. The Long Manufacturing Co. still has a two weeks' run before it in timber, and at the end of that time the company will begin constructing its new band saw mill. The Warren Land & Lumber Co. has made an addition to its mills in the way of an iron foundry and machine shop.

St. Louis.

[From our own Correspondent.]

ST. LOUIS, April 8.

The movement in lumber and timber continues to improve, and all indications point to an active spring and summer business. The hardwood trade is reported in a very healthy condition, with a firm tone to the general market. There is a good inquiry for nearly every class of stock, and

the demand is very heavy, especially from furniture manufacturers, wagon-material houses and agricultural-implement plants. Car factories are buying freely, and quartered white oak and plain white oak are about the most popular woods on the market. Quartered and plain red oak is also selling freely, with prices steady. The demand for first and second walnut is active, but common and culled stock is dull. There is a free movement in poplar, and receipts continue liberal, but of not sufficient volume to affect prices. There is a good inquiry for ash from local dealers, and stocks in first hands are firmly held, while prices are well maintained. Louisiana cypress is in good demand, and a number of large shipments have been made during the past week on orders from the East. Receipts continue liberal, and under a good demand prices are well maintained. Many of the hardwood mills are resuming operations, and it will be several months before stocks are in good shipping order. The R. L. Trigg Lumber Co. has both its mills operating on full time. The combined cut of its mills at Arkana, La., and the Sunny South Mills, at New Lewisville, Ark., amounts to about 35,000,000 feet per annum. The local building demand for lumber and timber is good, and general indications are very bright for a large demand during the spring and summer. Permits for new structures are being daily issued, some of which are for large buildings that will absorb a considerable quantity of lumber. The new price-list recently adopted is working satisfactorily, and there is perfect harmony in the trade, no one seeming disposed to make concessions in order to effect sales.

Southern Lumber Notes.

THE Gastonia Coffin Co., of Gastonia, N. C., wants prices, delivered, on white pine for boxes.

THE steam saw mill of R. C. Waller, near Warren, Ark., was totally destroyed by fire on the 2d inst. About 200,000 feet of lumber was entirely consumed. There was no insurance.

THE saw-mill plant in Greenville county owned by Messrs. Cooper & Spotswood, of Petersburg, Va., was sold at public auction on the 3d inst. It was purchased by Mr. Bailey, of Greenville county, for \$4100.

THE Mobile Saw Mill Co., erroneously known as the Baird Lumber Co., of Mobile, Ala., has erected a fine saw-mill plant five miles north of that city. Operations will commence about the 15th inst. The capacity of the mill is 100,000 feet of lumber daily.

THE improvements recently made to the J. H. D. Smoot planing mills at Alexandria, Va., include a patent blower, fire-proof shavings-room and swinging saw and fire apparatus. Mr. Frank Smoot speaks favorably of the outlook for a spring and summer trade.

A SPECIAL from Greenville, Ala., states that the Milner, Caldwell & Flower Lumber Co., which lost one of its largest saw mills by fire, is rebuilding on the site of the burned mill. The building has been completed, and workmen are now engaged placing the machinery.

THE exports of lumber and timber from the port of Pensacola for the month of March were as follows: Foreign, 44,503 cubic feet of hewn timber, 10,729,000 superficial feet of sawn timber and 11,028,000 superficial feet of lumber, valued at \$253,109. The exports to coastwise ports were 1,766,000 superficial feet of lumber, valued at \$21,192.

THE Bates Manufacturing Co. has been organized in Birmingham by George B. Bates, George A. Bates and W. A. Blythe, with a capital stock of \$5000. The purposes of the company are to manufacture wooden buckets, butter plates, vegetable

baskets, crates, etc. The building has already been erected and the machinery is being manufactured at Petersburg, Va.

THE Altamaha Cypress Mills, at Brunswick, Ga., were sold last week for the second time. They were bid in by Mr. Jos. Hilton for the Hilton-Dodge Lumber Co., the price being \$18,000. A check for \$5000 was deposited with Commissioner Boyle to insure the sale. Vice-President Foster states that if the sale is confirmed the mills will be immediately put in operation. The mills are nearly new, and cost \$90,000.

A DISPATCH from Pensacola, Fla., states that the Southern States Land & Timber Co., an English corporation, with headquarters in that city and offices in New York and London, has been placed in the hands of receivers by Judge Pardee, of the United States Circuit Court. The receivers are Clarence Carey, attorney, of New York, and Messrs. W. F. McCormick and Edgar M. Lamont, of Louisville, Ky.

AMONG the shipments of lumber from the port of Savannah during the past week were the following: Schooners Hugh Kelley for New York with 13,358 crossties; S. B. Marts for Baltimore with 425,000 feet of pitch pine; Harriet C. Kerlin for Philadelphia with 393,192 feet of pitch pine; and by steamers, to Boston 34,828 feet, to Baltimore 76,820 feet, to Philadelphia 44,767 feet and to New York 160,900 feet of pitch pine and 135,000 shingles.

AMONG the shipments of lumber from Jacksonville last week were the following: Schooners Evie B. Hall for Portland, Me., with 350,900 feet; Robert W. Daisey for Wilmington, Del., with 280,000 feet; Anna V. Lamson for Philadelphia with 275,000 feet, and the Etna for New York with 260,000 feet; the steamship Seminole cleared for New York with 300,000 feet of yellow pine, 4000 crossties and 2700 bundles of shingles, with other merchandise.

MR. WILLIAM C. CHASE, president of the Southern States Development Association, with offices in Washington, Chicago and New York, visited Cumberland, Md., last week, and is on a tour of inspection through West Virginia. It is stated that Mr. Chase is very much pleased with the prosperity at Cumberland and vicinity, and it is probable that on his return to Cumberland some steps will be taken to establish large wood works in that city.

Iron Markets.

CINCINNATI, April 6.

While the pig-iron market for the past week has been broader than previously, involving more transactions, at the same time the tonnage is smaller than for several weeks past, the reason being that no very large business has been closed. For the first time in over two years there is something like a general feeling among consumers of iron that any further decline in prices is improbable. This is a great point gained, for it means that the extreme hand-to-mouth policy that has so long prevailed may be followed by more liberal purchases. It is certain that many foundries have run their stocks so low that a little delay of supplies in transit causes inconvenience and perhaps stoppage.

Taking a view of the field at large, there are no particularly striking features in manufacturing. There is an increase in the melting of iron, and yet the tonnage is still very far below normal proportions. No one class of work seems to be favored beyond others. The agricultural-implement men feel some stimulus from the encouraging prospects for crops. Makers of engines and machinery are doing better business, the special activity being more in the line of building of water plants, electric railways, cotton mills and saw mills. Car-building still lags in a very disappointing way, but is not stagnant, as it was a year ago.

Among the furnaces there is a lively anticipation of better things to come, but a hesitation to talk higher prices until the foundation is so strong that there is no question of its giving away later. A few Northern furnaces have stiffened up in their views materially in consequence of a sharp increase in cost of production, but the business current is taken by those who are still willing to accept low prices. In Southern irons the special concessions that were frequent until a short time ago are no longer made, and regular prices are insisted upon, no matter how desirable the trade.

Money continues in active demand, and rates continue to harden. This is counted as the surest evidence that the general business of the country is slowly improving.

We quote for cash f. o. b. Cincinnati: Southern coke No. 1 foundry..... \$ 9 50@ \$10 00 South. coke No. 2 dry. and No. 1 soft. 9 00@ 9 25 Hanging Rock coke No. 1..... 11 50@ 12 75 Hanging Rock charcoal No. 1..... 15 00@ 16 50 Tennessee charcoal No. 1..... 13 00@ 14 50 Jackson county stone coal No. 1..... 14 00@ 14 50 Southern coke, gray forge..... 8 25@ 8 50 Southern coke, mottled..... 8 00@ 8 25 Standard Alabama car-wheel..... 15 00@ 16 00 Tennessee car-wheel..... 14 50@ 15 00 Lake Superior car-wheel..... 13 50@ 14 00

We quote for cash f. o. b. New York:

No. 1 standard Southern.....	\$11 75@ \$12 00
No. 2 standard Southern.....	10 75@ 11 00
No. 1 standard soft.....	10 75@ 11 00
No. 1 foundry lake ore coke iron.....	13 00@ 13 25
No. 2 foundry lake ore coke iron.....	12 25@ 12 50
Lake Superior C. C.	15 00@ 15 75
Southern C. C. W.	17 75@ 18 00

We quote for cash f. o. b. Cincinnati:

Alabama No. 1 foundry.....	\$12 00@ \$12 25
Alabama No. 2 dry. and No. 1 soft.	11 50@ 11 75
Alabama No. 3 dry. and No. 2 soft.	11 00@ 11 25
Alabama No. C. C. car-wheel.....	18 50@ 19 00
Strong L. S. coke iron No. 1 foundry.....	13 75@ 14 00
Lake Superior charcoal car-wheel.....	16 75@ 17 00
American-Scotch (Northern) No. 1.....	13 75@ 15 00
Jackson county silverly No. 1.....	17 00@ 17 50

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$10 25@ \$10 50
Southern coke No. 2.....	9 75@ 10 00
Southern coke No. 3.....	9 25@ 9 50
Southern gray forge.....	9 00@ 9 25
Southern charcoal No. 1.....	14 00@ 14 50
Missouri charcoal No. 1.....	12 50@ 13 00
Ohio softeners....	14 00@ 14 50
Lake Superior car-wheel.....	15 50@ 16 00
Southern car-wheel.....	16 00@ 16 50
Genuine Connellsburg coke.....	4 40
West Virginia coke.....	4 40

We quote for cash f. o. b. Philadelphia docks:

Standard Alabama No. 1 X.....	\$11 25@ \$11 50
Standard Alabama No. 2 X.....	10 50@ 10 75
Strong lake ore coke iron No. 1 X.	12 25@ 12 50
Strong lake ore coke iron No. 2 X.	11 75@ 12 25
Lake Superior charcoal.....	14 75@ 15 25
Standard Alabama C. C. W.	16 75@ 17 25

ROGERS, BROWN & CO.

TRADE NOTES.

IF you are looking for an investment in timber lands, mica mines or small industries, such as a water-power saw mill, grist mill, cotton gin, etc., in the South, note the advertisement of Mr. J. E. Hagood, of Charleston, S. C.

AFTER a careful test the Boston fire department has adopted the new ball nozzle for that department. Evidently the ball nozzle will hereafter play an important part in the work of fire departments throughout the country.

THE Tripod Paint Co., of Atlanta, Ga., has recently placed on the market a new shingle stain to be known as the Atlanta shingle stain, and since its introduction has met with a ready sale. A contract has just been received from the Cotton States and International Exposition specifying that this stain was selected, and it is to be used exclusively on the exposition buildings.

THE York Chemical Works, of York, Pa., announces that it has removed its offices to the Security Title & Trust Co.'s building, at No. 18 East Market street, in that city. It has increased facilities for transacting business, and will be pleased to have all customers and friends call on them when in the city. This company is noted for the reputation of its products, which have attracted much attention by users of chemicals.

BUSINESS is improving very rapidly with the Triumph Electric Co., of Cincinnati, Ohio, and some large additions to the company's plant are contemplated, so that the increasing demand for its machines can be supplied. The Triumph Company is engaged in manufacturing electric-light and power machinery, and has recently obtained contract for electric installation at Wilberforce University in competition with the large electric companies.

THE Lodge & Davis Machine Tool Co., of Cincinnati, Ohio, have opened a branch store at St. Louis, Mo., No. 720 North Second street, where they will carry a large stock of their well-known lathes, planers, milling machines and other standard tools. Mr. J. W. Wright, for many years connected with the works at Cincinnati and

later with the Chicago branch, will manage the St. Louis business. Heretofore the company have been represented in this city by simply a commercial agent.

THE Nordyke & Marmon Co., Indianapolis, Ind., has filled a "long-felt want" in supplying caps especially suitable for millers. The cap is not only light, but durable, looks well and will tend to prevent flour, dust and dirt particles from coming in contact with the hair. It is something indispensable in all well-regulated mills, and will doubtless be appreciated by employees. The Nordyke & Marmon Co. states that it has some left, and millers who are not supplied would do well to send in orders at once.

THE S. Obermayer Co., of Cincinnati and Chicago, has just received a cargo of East India plumbago direct from Colombo, Ceylon, which is probably the largest shipment of fine, high-grade silver-lead or graphite ever imported. It required fifty cars to carry it from the port of entry to its destination at the factories of the enterprising corporation. All judges of plumbago pronounce it to be the brightest and best ever brought to this country. This plumbago will be used in the manufacture of its standard grades of foundry facings.

THE well-known firm of James Stewart & Co., who have been so successful in large Southern contracts, such as elevators, railroad stations, power plants, etc., have closed a contract with the Home Cotton Oil Co., of St. Louis, for an addition to its plant, to be 125 feet by ninety feet in dimensions. The construction is to begin and is to be finished within ninety days' time. Messrs. Stewart & Co., whose home office is in St. Louis, make a specialty of large buildings, and are prepared to take contracts to be finished within a minimum time limit.

ONE of the most important Southern industries is the manufacturing establishment of Mr. James Bates, Nos. 1, 3 and 5 President street, Baltimore. Mr. Bates has been in this business for so many years that it seems hardly necessary to introduce him to the public as a manufacturer of the highest reputation. He has a plant which is equipped with all the latest appliances for turning out the very best class of elevator work, and is prepared to fill orders upon prompt notice. An elevator from his establishment is a guarantee of good workmanship and durability.

THE reputation of the American Ship Windlass Co., of Providence, R. I., for the quality of its work has extended throughout the country. A recent order was received from Capt. James Davidson, of West Bay City, Mich., for three steam towing machines and two steam windlasses. This is the second order received from the same concern. In addition to these orders, the American Company has received an order from Messrs. Wheeler & Co. for three steam windlasses and two steam capstans; also for two capstans and a steam yacht windlass from the same place.

THE Medart Patent Pulley Co., of St. Louis, is the largest manufacturer in the United States of iron pulleys. It has been established since 1879, and its products go to all parts of the United States. The main building is 300x100 feet, foundry 200x60 feet, all built substantially with brick. The upper floors of the main building are used as a machine shop for building special machinery for its own use. The lower floor is used for the making of shafting and pulleys. This company manufactures all its own tools and machinery. It is running a large force of men at the present time, and it reports trade much better than it was at this time a year ago.

THE Caroline Iron Works, of which Messrs. H. C. Larrabee & Co. are proprietors, situated on Caroline street, Baltimore, was started in 1852 and is one of the representative firms in this city. Their foundry, pattern, machine shops are fully equipped with all modern tools and machinery. They manufacture fine machinery castings, house castings, grate-bars of all kinds, boiler fronts, etc., which are unsurpassed for quality, smoothness and softness of iron. They make a specialty of plaster breakers, smelting pots for shot and sheet-lead works, Johnson patent pyrites burners, lump furnaces, acid eggs, chemicals, etc. The trade of this house extends throughout the Southern States.

MESSRS. B. F. STARR & CO., proprietors of the Baltimore Mill Furnishing Works, North and Centre streets, report business as very encouraging. Their factory is fully equipped with all modern machinery, tools and appliances known to the trade. They manufacture all descriptions of flour, saw and corn-milling machinery; also specialties for elevators, fertilizer and other works, and are prepared to give estimates for all kinds of flour mill supplies, from the largest and most modern to the smallest merchant or custom mill. They carry a full and varied stock of supplies—rolls, millstones, bolting chests, purifiers, centrifugal reels, wheat cleaners, rock crushers, mixers, screens; also leather, rubber and link-chain belting, silk and wire bolting cloths, etc.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

*In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Birmingham—Land Company.—The declaration of incorporation of the West Alabama Land Co. has been filed. The incorporators are E. W. Ruckor, of Birmingham; Wm. A. Hendley, of Roanoke; Thos. B. Lyons, of Virginia, and Lenena D. Murphy, of New York. The capital stock is \$50,000.

Birmingham—Woodenware Factory.—The Bates Manufacturing Co. has been incorporated by Geo. B. Bates, Geo. A. Bates and W. A. Blythe. The purposes of the corporation are to manufacture, buy and sell woodenware, such as butter-dishes, buckets, baskets, etc.; capital stock \$500; factory now being built at Avondale.

Birmingham—Electric Plant.—It is stated that a large electric plant will be built to supply power to manufacturing concerns.

Birmingham—Electric Plant.—The Consolidated Electric Light Co. will build a power plant.

Cullman—Cotton Mill.—A \$50,000 cotton mill company is proposed and subscription books have been opened.

Huntsville—Cotton Mill.—An Eastern company has made the Chamber of Commerce a proposition for the erection of a cotton mill to employ 500 hands.

Jasper—Mining, etc.—The Alabama Blasting & Mining Co. has filed articles of incorporation in the probate office; its purpose is to do a manufacturing and mining business. The incorporators are R. H. Elliott and Elizabeth Elliott, of Birmingham, and J. B. Carrington and Lulu Carrington, of Jasper.

Piedmont—Furniture Factory.—Alexander & Dwyer, lately noted, will manufacture also furniture, and will operate as the Hardwood Manufacturing Co.

Piedmont—Foundry, etc.—G. W. Rutherford has purchased and will operate the Piedmont Foundry & Machine Co.'s plant.

ARKANSAS.

Berryville—Flour and Lumber Mill.—J. R. Hanley thinks of putting in a large roller flour mill and lumber mill.

George's Creek—Flour Mill.—J. S. Hudson & Co. will remodel their buhr mill to the roller process.

FLORIDA.

Fernandina—Rice Mill.—Subscriptions are being taken for the proposed rice mill. Address the Chamber of Commerce.

Jacksonville.—H. D. McIntyre and others have incorporated the Florida Jockey Club and State Fair Association with a capital stock of \$150,000.

Longwood—Electric Plants.—Three power plants, two of 100 horse-power each and one of 300 horse-power, will be required for a proposed electric railway. Plants and road will cost \$400,000. Address E. W. Hencke, C. E.*

Tampa—Woodworking Plant.—W. M. Curtis, late of Yellwood, will establish wood novelty works in Tampa.

Tampa—Telephone Plant.—The Citizens' Telephone Co. expects to have its line in operation within ninety days. It now has more than 200 subscribers. S. J. Drawdy is president; A. C. Lewis, vice president; C. H. Keller, secretary and manager; capital stock \$12,000.

GEORGIA.

Atlanta—Land Company.—Chas. N. Fowler, Wm. A. Hemphill, W. R. Hammond, B. M. Blount and

Atlanta—Harness Works.—E. E. Lark & Co., of Middleport, Ohio, contemplate establishing harness and leather works in Atlanta.

others have incorporated the New Manchester Co. to deal in and improve lands, etc. The capital stock is \$50,000.

Atlanta—Planing Mill.—Traynham & Ray will rebuild their burned planing mill.*

Atlanta—Quarry, etc.—The Atlantic Quarry & Construction Co. has been incorporated. The paid capital is \$600, and the stock is held by Luis Skrainka, Michael Hanicke, etc. The object of the company is to construct and reconstruct streets, sewers, etc.

Atlanta—Water Mains, etc.—An ordinance will be introduced in the council providing for an election on \$100,000 of bonds for water mains, etc. Address the mayor.

Augusta—Ice Company.—The Consumers' Ice Delivery Co. has been incorporated to deal in ice with a capital of \$100.

Bainbridge—Barrel Factory.—Powell Bros., of Iron City, and B. Nussbaum, of Bainbridge, have formed a company to manufacture barrels.

Brunswick—Lumber Plant.—The Hilton-Dodge Lumber Co. has purchased the Altamaha Cypress Lumber Co.'s plant for \$18,000.

Cedartown—Pottery Works.—Mr. McMeekin has built a pottery and commenced operations.

Columbus—Bridge.—The proposed \$35,000 iron bridge, if built, will be in charge of the Columbus Railroad Co., and the city has voted \$10,000 to renew the present bridge.

Estell—Iron Mines.—The Brown Mining Co., of Rockwood, Tenn., is opening new mines at Estell.

Harmony Grove—Cotton Mill.—The Harmony Grove Cotton Mills will put in sixty additional looms, making 145 in all.

La Grange—Cannery.—A canning company will probably be formed.

Oglethorpe—Brick Works.—The Oglethorpe Brick Manufacturing Co. has been organized to erect works of 40,000 capacity daily.

Oredeal—Iron Mines.—The Marsh Mining Co. is projecting an extensive mining plant, including bins, washers, crushers, etc.

Rocky Face—Flour Mill.—Hassler Bros. will put in a small roller outfit.

KENTUCKY.

Covington—Transportation.—The St. John's Transportation Co., capital stock \$100, has been incorporated.

Louisville—Water Works.—Several parties will erect a small water-works plant.

Louisville—Telephone Company.—The Southern Standard Telephone Co. will be organized in the future to operate in Kentucky, Tennessee, North Carolina and South Carolina with a capital stock of \$4,000,000. This company is to be a branch of the new Standard Telephone Co., announced last week, of which Thurlow Weed Barnes, of New York, is the president.

Louisville—Chewing-gum Company.—The Wuchner Chewing Gum Co., capital stock \$2000, has been incorporated by Chas. P. Fink, Geo. G. Wuchner, Edward F. Fink.

Louisville—Outing Company.—The Columbia Outing Co., capital stock \$2000, has been incorporated by John Trebing, John Koch, James Kaltenbach and others.

Louisville—Publishing.—The Star Publishing Co., capital stock \$5000, has been incorporated by Brent Altsheier, Edward Altsheier and B. F. Lipold.

Middlesborough—Chewing-gum Factory.—The Walla Walla Gum Co. will operate the chewing-gum plant noted last week.

Mt. Sterling—Printing, etc.—The Montgomery Printing Co., capital stock \$1000, and the Mt. Sterling Telephone Co., capital stock \$4,000, have been incorporated.

Owensboro—Telephone System.—It is proposed to organize a company to establish a new telephone system. R. Monarch is interested.

Sanders—Flour Mill.—E. T. Williams will increase his mill's capacity from forty to sixty barrels.

LOUISIANA.

Crowley—Electric-light Plant.—Owing to conditions existing, the city has as yet been unable to award contract for its proposed electric-light plant. Further steps will shortly be taken; P. J. Chappuis, mayor.

Lecompte—Sugar Refinery.—Jos. H. Meeker will rebuild a new sugar refinery to replace the one burned last September; the new plant will cost \$75,000.

New Orleans—Brewery.—D. E. Einsidel has prepared plans for an addition to the Louisiana branch of the New Orleans Brewing Association, 10 Carondelet street, to be 30x120 feet, built of

brick, with stone foundation, have galvanized iron cornice, composition roof, mineral wool, iron beams and columns, new brewing and ice machinery, steam pump, hand-power freight elevator, speaking tubes, skylights, gas and plumbing fixtures, electric lighting, fire escapes, shutters, crestings, concrete floors and sidewalks; cost \$15,000.

New Orleans—Planing Mill.—Otto Kloop will erect a planing mill.

New Orleans—Electric Plant.—The St. Charles Street Railroad Co. intends to build an electric plant to furnish power; the company is expending over \$70,000 in construction and machinery.

New Orleans—Telephone Company.—The New Orleans branch of the new Standard Telephone Co. (Thurlow Weed Barnes, of New York, president,) has organized as the Gulf States Standard Telephone Co.; A. A. Maginnis, president; W. J. Beaman, vice-president, and Harry Allen, general manager. This company will control Louisiana, Mississippi, Alabama, Georgia and Florida.

Shreveport—Telephone Company.—The board of directors of the Citizens' Cooperative Telephone Association have met and elected W. F. Taylor, president; S. B. Johnson, vice-president; L. M. Carter, treasurer; J. W. Taber, secretary and general manager, and the following executive committee: Levi Cooper, C. S. Steere, S. B. Johnson, Ben Holzman and H. F. Doll.

MARYLAND.

Baltimore—Medicine Factory.—The Oriental Manufacturing Co., for the manufacture and sale of proprietary medicines and druggists' specialties, has been incorporated by John W. Jones, G. Arlow Hall, George Albaugh, George W. Morris and H. Edward Deimel; capital \$1000.

Baltimore—Mining.—The Siskiyou Mining Co., for doing a general mining business, has been incorporated by William S. Elmer, Ninian L. Ireland, Walter F. Elmer and George H. Elmer, of Baltimore, and George F. Wheeler, of Colorado; capital stock \$18,000.

Baltimore—Gas-engine Works.—The White & Middleton Gas Engine Co. will erect a new factory. Site has been selected and two story building 80x120 feet will be erected. Considerable new machinery especially adapted to the company's purpose will be put in.

Baltimore—New Wharves.—The Baltimore, Chesapeake & Atlantic Railway Co. has decided to extend its business on the Great Wicomico and Piankatank rivers by building several new wharves on those rivers. The plans for the new piers are in the hands of an architect, and as soon as they are completed the work of building will begin. Each of the wharves have pier heads 40x40 feet, and will have attached freight houses and waiting rooms which will be 16x32 feet.

Baltimore—Brewery.—The Lion Brewing Co., for the manufacture of beer and other malt liquors, has been incorporated by Frederick W. Oehm, John B. Biemiller, John H. Biemiller, Kasper Zumkeller and F. Gustav Blanke, with a capital stock of \$100,000. The incorporators, with Edward and Charles T. Biemiller, are the directors for the first year. The parties interested bought the old Sommerville Brewery on the Calvert road at the receivers' sale in February last for \$60,000, and now propose to put it into active operation.

Baltimore—Clay-pigeon Works.—The Excelsior Target Co. has been incorporated by Halleck A. Perose, Thomas McGuinness, Henry Keidel, Walters T. Harvey, John McPhail, A. G. Alford, William V. Wilson, Jr., and Howard Munnikhuysen, with a capital of \$100,000. The corporation will manufacture shells, targets, traps and other sportsmen's supplies. This company will operate the plant noted some weeks ago as to be built by Mr. Penrose and associates.

Baltimore—Tin Mills.—The Baltimore Iron, Steel & Tinplate Co. has put its tinplate mills in operation again, employing 250 men.

Cumberland—Woodworking Plant.—Wm. C. Chase, of the Southern States Development Association, of Washington and New York, contemplates establishing a woodworking plant.

Elkton—Sewers, etc.—There is talk of issuing bonds for sewers and street improvements. Address the mayor.

Lonaconing—Water Works.—The town council has granted a franchise for building and operating a water-works plant to Malcolm Sinclair, of Cumberland. The grant is for a period of thirty-five years, and the town pays for not less than thirty-three hydrants at \$33.33 each per annum. Hoge & White, civil engineers, of Wheeling, W. Va., are preparing plans and specifications; gravity system will be used.

North Branch—Flour Mill.—Chas. R. Wilson will remodel his flour mill to the roller process (twenty-five barrels capacity).

Secretary—Shirt Factory.—Conkle & Hubbard

will rebuild their shirt factory recently burned; fifty hands were employed.*

MISSISSIPPI.

Coahoma—Water Supply.—The Memphis Well Co. has sunk an artesian well.

Edwards—Canning Factory.—A company contemplates putting in a cannery.*

Scranton—Water Works.—At a special meeting of the board of alderman on April 5 to consider the question of supplying the town with water works, it was resolved to invite manufacturers throughout the country to send in proposals for the purpose. The following committee was appointed to receive proposals and submit them to the board: S. R. Thompson, C. E. Chidsey and George H. Huggins.

MISSOURI.

Carthage—Flour Mill.—A. H. Witt contemplates erecting a mill.

El Dorado Springs—Electric-light Plant.—A franchise has been granted to W. B. Lewis and his associates by the board of aldermen to erect an electric light plant, franchise lasting twenty-one years. The ordinance granting the franchise provides that the plant shall be in operation within two years. W. B. Lewis has gone to St. Louis for the purpose of interesting parties in the plant.

Golden City—Grain Elevator.—H. H. Steele will erect a 20,000 to 30,000-bushel grain elevator.

Greenville—Grist Mill.—Faulkner Bros. contemplates building a grist mill.

Jasper—Flour Mill, etc.—Baird & Tallman will remodel their mill, putting in new machinery and building a 20,000 to 40,000-bushel grain elevator.

Joplin—Roads, etc.—There is talk of \$6000 for road improvements and sewers. Address the mayor.

Kansas City—Fruit Cultivation.—Articles of incorporation have been filed by the Ozark Fruit Co. The capital stock is \$175,000; incorporators, Arthur E. Stillwell, Chas. A. Broley, Robt. B. Cone, Frank B. Wilson, F. A. Hornbeck, Jack T. Nolthenius and E. E. Dearborn. The company will operate fruit farms.

Kansas City—Sugar Refinery.—W. L. Parkinson, of Ottawa, Kans., intends to build a sugar refinery at Kansas City if certain railroad facilities are supplied.

Miller—Flour Mill.—R. W. Hale, of Jasper, will build a 25 to 40 barrel mill at Miller.

Monett—Flour Mill.—Carter & Williams contemplates building a 25 to 30 barrel flour mill.

Nevada—Flour Mill.—Graves & Ambrose will erect 200 barrel flour mill; site purchased.

Racine—Flour Mill.—The Dayton Milling Co. contemplates remodeling its mill.

Ridgeway—Flour Mill.—J. E. Odyke will build a 40 barrel flour mill.

St. Louis—Flour Mill.—H. F. Amick will build a 50-barrel flour mill.

St. Louis—Telephone Company.—The Central Standard Telephone Co., of St. Louis, Kansas City and Lincoln, capital \$5,000,000, to operate in Missouri, Kansas, Nebraska and Arkansas, is in process of organization, the promoter being Griffith Colt, president of the Union Trust Co. of St. Louis.

NORTH CAROLINA.

Fayetteville—Electric-light Plant.—The city will hold an election on May 6 to consider issuing bonds for \$10,000 to build an electric light plant. Address the mayor.

Henderson—Cigar Factory.—D. E. Aycock has started a cigar factory.

High Point—Cotton Mill.—H. F. Smith, of Philadelphia, Pa., is reported as contemplating the erection of a cotton mill at High Point.

Mill Bridge—Flour Mill.—I. L. Stone will put rollers in his flour mill.*

Salem—Cotton Mill.—The South Side Manufacturing Co. has been organized to build a 5000-spindle cotton mill; H. E. Fries, president.*

Saw—Flour Mill.—Overcash & Fleming will put rollers in their flour mill.

Wilmington—Shingle Mill.—The W. T. Parker Shingle Co. will erect a shingle mill of 15,000 daily capacity.

Wilmington—Brokerage.—The Wilmington Brokerage Co. has been chartered with a capital stock of \$10,000; president, C. W. Worth; first vice-president, J. C. Stevenson; second vice-president, D. L. Gore; general manager, J. M. Forshee; office, 109 North Water street.

SOUTH CAROLINA.

Columbia—Mercantile.—A commission has been issued to James P. Gossett and G. H. Mahon, of Williamston, as corporators of the Gossett &

Mahon Co., the object being to do a general merchandise business. The capital stock is \$40,000.

Greenville—Cotton Mill.—Site has been chosen for the Mills Cotton Mill, and work on it will commence at once. Ten thousand spindles and looms to suit will be installed.

Hickory Grove—Cotton Mill.—The Collier Cotton Mills (represented last week by error under Hickory Grove, N. C.) will build a \$100,000 plant; T. P. McDill, secretary.

Irene—Cotton Mill.—The Saxe Gotha Mill Co., noted lately under Lexington, will build its plant at Irene; equipment to be 500 spindles and 220 looms. Address W. P. Roof, Lexington, S. C.

Manning—Knitting Mill.—It is reported that W. S. Marvin will erect a \$50,000 knitting mill.

Walhalla—Cannery.—The Walhalla Canning Co. has been organized with a capital stock of \$1000 and privilege of raising to \$5000; officers, G. W. Pratt, president; W. D. Moss, vice-president; W. L. Verner, treasurer, and James Thompson, secretary. A plant will be built at once.*

TENNESSEE.

Chattanooga—Cotton Mill.—Vance & Kirby write that they have leased their cotton mill to the W. A. Steers Co. This is the new mill noted last week.

Chattanooga—Saddlery.—The Chattanooga Saddlery Co. has moved its factory into its new building, and will add considerable machinery.

Cleveland—Lead Furnaces, etc.—The Blue Springs Mining Co. is reopening its lead mines, and will employ 150 men. The new lead furnace is also in blast, producing 500 pounds of pig lead daily.

Cleveland—Ice Plant.—S. W. Marshall & Co. will erect an ice plant.

Kingsport—Flour Mill.—The Riverside Planing Mill will erect a flour mill.

Kinston—Bridges.—The county is considering the construction of two large bridges. Address the county commissioners.

McMinnville—Telephone Company.—A telephone company has been formed to establish an exchange. Geo. E. Cartwright is president; D. B. Carson, vice-president, and W. S. Lively, secretary.

Memphis—Telephone System.—L. E. Drake, of Anderson, Ind., is endeavoring to form a telephone company in Memphis.

Muddy Creek—Flour Mill.—A company will be organized to build a flour mill.

Rockwood—Iron Mines, etc.—The Brown Mining Co., the Tarwater Ore Co. and Brown & Baker, iron miners, have consolidated their ore business at Rockwood, and are operating as the Brown Mining Co.; J. F. Tarwater, president, and J. N. Baker, general manager, of the company.

Rome—Quarry.—J. H. Connor & Co. have opened a stone quarry.

TEXAS.

Alvord—Canning Factory.—The Alvord Cannery will overhaul its plant and put in new machinery.

Austin—College.—The Griffiths College of Commerce, with a capital stock of \$10,000, has been incorporated by J. H. Henderson, John W. Hornsby, Eni F. McCarty, L. N. Goldback and others.

Brownsville—Bridges, Roads, etc.—An election will be held on May 7 to consider a bond issuance of \$50,000 for constructing two iron bridges, improve county roads, etc. Address clerk to county commissioners.

Cameron—Compress.—The Cameron Compress Co., capital stock \$60,000, has been incorporated by E. H. Phillips, S. J. Webb, C. H. Yoe and W. M. Jeters.

Cuero—Fire Apparatus.—A fire company has been organized with A. Coutret, president, and W. J. Lochner, secretary.

Cuero—Telephone Company.—The Cuero Telephone Co., capital stock \$4000, has been incorporated by Wm. Frobose, C. L. Sadtler, Wm. Wagner, Lee Joseph, W. R. Rathbone, D. Hunter and Sam C. Lackey.

Dallas—Compress.—The Dallas New Cotton Compress Co., capital stock \$100,000, has been incorporated by Charles E. Allgeyer, of Louisiana; J. Rene Blech, of France; James Babel and Waid Hite, of Dallas.

Fort Worth—Medicine Company.—The Zen Zem Medicine Co., capital stock \$5000, has been incorporated by H. E. Gray, W. F. Walker and W. A. Fox.

Houston—Flour Mill.—The Houston Mill & Elevator Co. will put in a flour plant in the future.

Houston.—The Houston Optical Co., with a capital stock of \$2000, has been incorporated by A. E. Kiesling, W. W. Chamberlin and Isadore Gluck.

Mathis—Rock Quarry.—J. W. Mathis will probably open a rock quarry.

Navasota—Lumber Company.—The Navasota Lumber Co., capital stock \$5000, has filed charter; incorporators, A. S. Hall, James N. Baylor and J. W. Gregg.

Paris—Fire Company.—O. A. Perry, E. S. Connor and A. W. Neville have incorporated the Phoenix Fire Co.

San Antonio.—The M. M. Wingfield Co., capital stock \$5000, has been incorporated by E. R. Rothwell, V. P. Brown, Fred Kerble, R. H. Sommerville, A. Lewy, W. A. Lewis, J. C. Wingfield and L. A. Wingfield.

San Antonio—Paper-box Mill.—R. L. Burnett will manufacture paper boxes and paper goods (not paper, as recently stated). The business has been in operation several months.

San Antonio—Publishing.—The National Liquor Dealers' Publishing Co., capital stock \$5000, has been incorporated by John Leausten and others.

Taylor—Electric-light Plant.—B. Garry has purchased the Taylor electric light plant at foreclosures sale for \$10,975.

Tyler.—The Texas Fruit Palace, with a capital stock of \$25,000, has been incorporated by S. H. Cox, J. P. Douglass, J. T. Harris and others.

Waco—Electrical Company.—The Waco Electrical Supply Co., capital stock \$10,000, has been incorporated by S. A. Hobron, Eugene Farly, W. M. Seley, J. M. Seley and A. P. Moore.

Waco—Compress Works.—The Bessonette Cotton Compress Manufacturing Co. has increased its capital stock from \$1,000,000 to \$1,500,000.

VIRGINIA.

Alexandria—Planing Mill.—The J. H. D. Smoot Planing Mills has put in considerable new machinery.

Buena Vista—Coop Works.—The American Folding Coop Co. has been organized with Julius Graham as president; Thomas Marr (the inventor), vice-president; B. E. Vaughan, secretary and treasurer; J. M. Peak, manager. The company is now making fifty coops per day with its full force of ten men.

Charlottesville—Telephone Exchange.—The Interstate Telephone & Telegraph Co., of Durham, N. C., will erect an exchange in Charlottesville.

Gordonsville—Telephone Exchange.—The Interstate Telephone & Telegraph Co., of Durham, N. C., will erect an exchange in Gordonsville.

Lynchburg—Planing Mill.—B. P. Thornhill & Co. will rebuild their sash, door and blind mill, to employ fifty hands.*

Orange C. H.—Telephone Exchange.—The Interstate Telephone & Telegraph Co., of Durham, N. C., will erect a telephone exchange in Orange C. H.

Portsmouth—Bridge.—The Portsmouth Water-front Land Co. has been organized, with Henry Kirn, president. For \$50,000 this company has purchased thirty-three acres of the most valuable water-front property in Portsmouth harbor, and will build a bridge across Scott's creek.

Pulaski City—Zinc-mining, etc.—The Bertha Zinc & Mineral Co. has sold its mines, plants, lands, etc., to the Bertha Mineral Co. of New Jersey.

Rinker—Flour Mill.—P. S. U. Rinker will put in a 40 barrel full roller system.

Richmond—Oil-can Works.—The Old Dominion Oil-can Co. has been chartered to manufacture the New Departure oil-can, etc. The capital stock is to be \$10,000. Branch R. Allen is president; John Adam, vice-president; W. B. Saunders, secretary and treasurer; R. W. Spillman, general manager.

Richmond—Telephone Company.—A charter has been granted to the American Telephone & Telegraph Co. of Virginia, the purpose of which is to construct and operate telephone and telegraph lines throughout Virginia. The capital stock is to be \$50,000. The officers for the first year are: President, Edward P. Meany, Newark, N. J.; secretary, Melville Egleston, Elizabeth, N. J.; treasurer, James C. Morris, Plains, N. J. Directors: Edward J. Hall, Edward P. Meany, Melville Egleston, all of New Jersey; Chas. R. Bangs, of New York, and Geo. Wayne Anderson, of Richmond.

Staunton—Telephone Line.—A charter has been granted to the Middlebrook Telephone Co. to construct a telephone line from Staunton to Lexington, Va., and collateral lines. The principal office of the company is to be at Middlebrook, and the maximum capital \$5000. John H. Bowman is president; J. Frank Clemmer, vice-president; H. A. Shepherd, secretary; W. W. Sproul, treasurer; J. F. Clemmer, W. W. Sproul, H. A. Shepherd, William McComb, H. M. Clemmer, D. S. Condon and W. C. Bossman, directors.

Wytheville—Flour Mill.—The Electric, Power & Improvement Co. contemplates putting in its mill three stands of rollers, two additional thirty horse-power turbine water-wheels, water-power, 12-foot fall.

WEST VIRGINIA.

Brandywine—Flour Mill.—M. G. Trumbo will build a roller flour mill.

Burnt House—Flour Mill.—Sheridan Hardman contemplates building a flour mill.

Charleston—Transfer, etc.—The Charleston Transfer & Wharfage Co. has been incorporated with an authorized capital of \$10,000 by H. L. Dickinson, H. W. Comstock, J. F. Brown, John S. Dickinson and E. W. Knight.

Dillslow—Flour Mill.—Hagedorn & Sons will put in rolls.

Masontown—Flour Mill.—Wm. Johnson will change his mill from buhrs to rolls.

Salem—Water Works.—The Salem (W. Va.) council has adopted an ordinance appropriating \$2000 for water works. The ordinance will be voted on at an election April 25. Address the mayor.

Staats Mills—Flour Mill.—Enoch Staats will put rolls in his mill.

BURNED.

Bishopville, S. C.—O. C. Scarborough's Phoenix Hotel; loss \$7000.

Brownsburg, Va.—W. M. Lee's stave mill; loss \$4000.

Hillsboro, N. C.—F. Grymes's shuttle factory; loss \$2500.

Morgan City, La.—John Dalton's oyster packery.

Nacogdoches, Texas.—Jas. M. McCuistion's saw mill; loss \$1500.

Warren, Ark.—R. C. Waller's saw mill.

BUILDING NOTES.

Atlanta, Ga.—Contract for building the woman's building at the exposition has been awarded to W. H. Heifner at \$20,000.

Atlanta, Ga.—Hotel.—Venable Bros. will organize a company to build a 10-story hotel of Georgia granite; building to be fire-proof, have four elevators, complete modern equipment, etc. Work will commence at once.

Atlanta, Ga.—School.—An ordinance will be introduced in the city council providing for an election on \$100,000 of bonds to complete the Boys' High School, etc. Address the mayor.

Atlanta, Ga.—School.—J. B. Legg, of St. Louis, Mo., has prepared plans for the \$100,000 Mexican village which is to be constructed for the exposition. The Mexican Village Exposition Co. will own the village.

Baltimore, Md.—Car Stables.—The City & Suburban Railway Co. will build car stables, etc.; building to be three stories high, 400x250 feet

Batesburg, S. C.—Hotel.—The hotel noted last week will doubtless be built. Address W. P. Cullum.

Birmingham, Ala.—Church.—The Cumberland Presbyterian congregation intends to build a church to cost about \$16,000; Rev. R. D. Wear, pastor.

Charlotte, N. C.—Church.—Tryon Street Church intends to erect a new structure. Address C. W. Tillett.

Charlottesville, Va.—Bank Building.—The People's National Bank has purchased site for its proposed new building and will soon let contract.

Charlottesville, Va.—Church.—The vestry of Christ Church talks of erecting a new edifice to cost \$16,000 or more.

Clarksville, Ga.—Hotel.—E. P. West will build a 20-room hotel to cost \$4000; wants plans, and will need plate glass and bay windows.

Dallas, Texas—Warehouse.—Huey & Philip will build a \$5000 addition to warehouse, and Mrs. F. B. Spellman, three cottages to cost \$500.

Fort Smith, Ark.—Dwellings.—H. Ryan has prepared plans for a residence for J. M. Sparks, to have galvanized-iron cornice, iron crestings, polished granite columns, hot-water heating, etc.; cost \$6000.

Georgetown, Ky.—College.—Contract for building the new dormitory for Georgetown College has been let to John W. Lucas at \$35,000.

Hamlet, N. C.—Hotel.—The new hotel already noted will be built by John McK. Alford, of Maxton; it is to contain forty rooms.

Homer, La.—Dwelling.—C. H. Moise, of New Orleans, has prepared plans for a residence for J. C. Dupont, to have electric bells, laundry fixtures, etc.; cost \$5000.

Houston, Texas—Hotel.—Isidor Hershman will remodel the Rosenfield House, expending \$5000.

Huntington, W. Va.—Churches.—J. B. Stewart has prepared plans for church for the Christian congregation, to have slate roof, steam heating, etc.; cost \$12,000; T. J. Frichard and J. A. Jones, building committee. Same architect has prepared plans for repairs to the Fifth Avenue Baptist Church, to have steam heating, etc.; cost \$7000; contract let. Same architect has prepared plans for the Twentieth Street Baptist Church to cost \$10,000; Rev. Mr. Loving, pastor.

Joplin, Mo.—City Hall.—There is talk of a new city hall to cost \$24,000. Address the mayor.

Knoxville, Tenn.—Courthouse.—W. Chamberlin & Co. will prepare plans for enlarging the Knox county courthouse.

Knoxville, Tenn.—W. Chamberlin & Co. have prepared plans for the new grandstand for baseball grounds.

Louisville, Ky.—Warehouse.—A \$35,000 warehouse will be built. Site has been purchased from John A. Stratton & Co.

Macon, Ga.—Schools.—Additions will be made to Gresham, Alexander, Winship and Vineville school buildings during the summer. The plans are now being drawn by local architects; D. Q. Abbott, superintendent.

Palmyra, Mo.—Public Building.—H. J. Blanchard, of Hannibal, is preparing plans for public building which will have a jail in basement; Harry W. Koch, chairman of building committee.

Pulaski City, Va.—Courthouse.—Pulaski county will build a new courthouse to cost \$20,000. L. S. Calfee will give information.

Richmond, Va.—Engine-house.—Contract has been awarded to N. E. Anarrow for the erection of an engine-house at \$7351.50.

San Antonio, Texas.—F. M. Hicks will erect a four-story modern cutstone building.

Sistersville, W. Va.—Schools.—The city election has decided the issuance of \$20,000 in bonds for schools. Address the mayor.

Sistersville, W. Va.—Plans are completed for a brick block three stories high, with limestone

Morgantown, W. Va.—Hotel.—A report states that a new hotel will be built on the site of the Franklin House.

Mt. Pleasant, Texas—School.—P. B. Ligon, of Pittsburg, Texas, has received contract to erect a \$10,000 school building in Mt. Pleasant.

New Orleans, La.—Clubhouse.—The Harmony Club's proposed new house, noted last week, is to cost about \$75,000. A site has been purchased 160x110 feet in size for \$25,000. Address I. D. Moore, president.

New Orleans, La.—Dwellings, etc.—Building permits have been issued to H. A. Seiler for a two-story frame dwelling to cost \$4500; to the administrators of the Tulane educational fund to build a two-story brick structure to cost \$25,000, and to the First Methodist Episcopal Church to build a church to cost \$6000.

New Orleans, La.—Office Building.—The New South Building and Loan Association has purchased site for its proposed new building to cost \$40,000 to \$50,000.

New Orleans, La.—Stable.—Albert W. Maas & Son have prepared plans for a stable for E. Frey, to be 30x60 feet, built of frame and brick, have plumbing and gas fixtures, ventilators, stalls and stable fixtures, window guards; cost \$3500.

New Orleans, La.—Stable.—Toledano & Reusch have prepared plans for a stable for W. D. Denegre, to be built of pressed brick, have slate roof, galvanized-iron cornices, iron beams and columns, etc.; cost \$16,000.

New Orleans, La.—Residences.—C. H. Moise has prepared plans for a residence for E. A. Leonval, to have electric bells and lights, hot-air heating, etc.; cost \$7500. Same architect has plans for residence for Mrs. Allen, to have hot-air heating, etc.; cost \$8300. Same architect has plans for residence for Mrs. Ogden, to have electric bells, incandescent lighting, etc.; cost \$6500. A. A. Adams & Co. have prepared plans for a dwelling, to have slate roof, electric bells and lights, hot-air heating, laundry fixtures, etc.; cost \$9000. W. C. Williams & Co. have prepared plans for an elegant residence for Miss B. Blanchard, to have incandescent lighting, hot-air heating, laundry outfit, blinds, hydraulic passenger elevator, etc.; cost \$10,000; the contract for erection has been awarded to Kelly Brothers. Thos. Sully & Co., have prepared plans for residence for J. W. Castles, to have marble and terra-cotta trimmings, hot-air and steam heating, incandescent lighting, laundry fixtures, hydraulic passenger elevator, etc.; cost \$9000. Plans have been prepared by M. L. Costley for J. A. Harrel & Son's proposed store building, to be of brick with terra-cotta trimmings, have galvanized-iron cornices, steam heat, store fronts, steel beams, iron columns, passenger and freight elevator, gas fixtures and plumbing, incandescent lighting, etc.; cost \$8000.

New Orleans, La.—Dwellings.—Frank P. Garelley has prepared plans for a residence for L. M. Harrell, to have electric bells, incandescent lighting, laundry outfit, hot-air and furnace heating; cost \$9500. Same architect has plans for residence, to have marble trimmings, galvanized-iron cornices, copper bay, hot-air and furnace heating, laundry fixtures, etc.; cost \$11,000. Frank M. Bartlett has prepared plans for a store and dwelling for David A. Hackney, to have composition roof, iron columns and beams, electric bells, electric lighting; cost \$6000. E. A. Frederic has prepared plans for a double tenement, to have electric bells, blinds, etc.; cost \$5000. Same architect has plans for residence for P. J. McMahon, to have speaking tubes, hot-air heating, laundry fixtures; cost \$6000. O'Neill & Koch have prepared plans for one single and one double two-story dwelling for T. Yaniewski, to have electric bells, laundry outfit, ventilation registers, etc.; total cost \$7500

foundation, iron roof and iron supports to all floors, to have iron and plate glass store fronts, steam or furnace heat, outside iron fire-escape. Address R. Broadwater.

Smithsburg, Md.—Depot.—The Western Maryland Railroad (off. e. Baltimore) will build a depot.

St. Louis, Mo.—Dwellings.—Permits to build have been issued to G. Hardebrick to erect a two-story dwelling to cost \$7000, and to S. Quinette for flats to cost \$5000.

St. Louis, Mo.—Dwellings.—Building permits have been granted to W. H. Miltenberger to erect six dwellings to cost \$48,000, and to F. W. Faut, Jr., to erect four dwellings to cost \$12,000.

St. Louis, Mo.—Dwellings.—Building permits have been issued to Joseph Farrell for two adjoining flats to cost \$7500; J. J. Bizant, four adjoining flats, \$5000; O'Malley Bros., four adjoining flats; J. G. Brandt, four stores and flats, \$8000; Chas. H. Hoke for a dwelling, \$5500, and to John Scullin for ten frame dwellings, \$10,000.

Washington, D. C.—Church.—A new \$600 structure will be built for St. Margaret's Episcopal Church after plans by J. G. Hill.

Upper Marlboro, Md.—Church.—About \$500 will be spent on improvements to St. Mary's Catholic Church.

Washington, D. C.—New Buildings.—William J. Palmer has completed plans for five two-story-and-basement store and dwelling-houses to cost about \$12,000; C. C. Clokey has the contract. Plans are being prepared by M. Hunter Jones for twenty two-story-and-cellars dwellings for John Burns to have fronts of press brick and white stone. Francis & Schneider have awarded the contract for eight houses to George Dove. J. F. Denson has prepared plans for two frame stores, two cottages, a bowling alley and amphitheatre at Riverside Park.

Washington, D. C.—Dwellings.—Building permits have been issued to Louis R. Pek, brick building, cost \$4000; T. P. Reside, brick dwelling, \$4000; J. H. Lane, four dwellings, \$10,000.

Winfield, W. Va.—Courthouse.—Plans and specifications are wanted until June 3 for remodeling and enlarging Putnam county courthouse. Address R. A. Salmons, clerk.

Zebulon, Ga.—Courthouse.—Plans have been adopted for the proposed \$30,000 courthouse; will want tower clock, vault, fixtures, furniture, etc.; W. H. Hartley, clerk.

RAILROAD CONSTRUCTION.

Railroads.

Aberdeen, N. C.—The Aberdeen & West End road, in which the Page Lumber Co. is interested, is being extended to Troy, twenty miles.

Allard Tenn.—The Crawford Coal Co., of Terre Haute, Ind., advises the MANUFACTURERS' RECORD that the line it is surveying through Fentress county is about sixty miles long. Construction work may begin about July 15.

Americus, Ga.—It is reported that the Savannah & Western may be consolidated with the Savannah, Americus & Montgomery, forming a line from Birmingham to Savannah by building seventeen miles from Muldrow, Ga., to Savannah. T. Edward Hambleton, of Baltimore, is receiver of the latter road.

Austin, Texas.—The Vining & Coleman Railway Co. has been authorized to issue \$13,500 per mile in bonds to build its twenty miles of road. The Vining Coal Co. at Austin is promoting the project.

Charleston, W. Va.—The Panther Creek Lumber Co. has decided to build a railroad twelve miles long up Panther Creek valley to haul timber to market.

Charleston, W. Va.—F. M. Pierce, of New York; F. R. Magee and John D. Miller, of Brooklyn, are reported to be interested in the Guyandotte & Atlantic Company, which is projecting a line from the Ohio river along the Guyandotte, New and Bluestone rivers to Pineville, W. Va.

Charleston, W. Va.—The Charleston, Clendenning & Sutton has been completed to a point near Clay Courthouse. John H. Drake, of Philadelphia, is managing director.

Dallas, Texas.—It is reported that the West Dallas road is to be extended into the city. H. C. Scott, of St. Louis, is president.

Dothan, Ala.—The South Alabama & Gulf Company has been chartered to construct a line from Dothan to a connection with the Louisville & Nashville system at Greenville, Ala. J. R. Crawford is among those interested.

Excelsior Springs, Mo.—The Sulpho-Saline Railway Co. is considering the idea of extending its line from Excelsior Springs to Lawson, Mo., five miles, to connect with the Atchison, Topeka & Santa Fe. S. F. Scott has been elected president, and W. A. Butterfield, secretary, of the company.

Fort Myers, Fla.—A railroad line is being projected from Fort Myers to Punta Gorda by residents of Fort Myers.

Gainesville, Texas.—Engineer Caswell is arranging preliminaries for a final survey of the Gainesville, McAlister & St. Louis Railroad.

Georgetown, Texas.—The first engine and several flat cars have arrived for use on the Trinity, Cameron & Western, and tracklaying will begin at once. Emzy Taylor is president.

Hickory, N. C.—J. L. Ludlow, of Winston, N. C., is making surveys for a line for the Catawba Lumber Co. to extend from the Catawba river to Hickory.

Houston, Texas.—J. T. James, of Hamilton, and others are interested in a scheme to extend the St. Louis Southwestern through Hamilton and Brown counties to a connection with the proposed Vining & Coleman road.

Huntington, W. Va.—The Cincinnati, Hamilton & Dayton, it is reported, has surveyed a route along the Guyandotte valley to be connected with its Ohio system by a bridge across the Ohio river. C. Wood, at Cincinnati, Ohio, is chief engineer.

Knoxville, Tenn.—Col. Mike Brown, of Barnwell, S. C., of the Carolina Midland road, and Geo. A. Wagener, of Charleston, S. C., it is stated, are endeavoring to form a company to build a road from Knoxville to Charleston independent of the Boone project.

Lebanon, Mo.—Enginner E. C. Eickensdorfer is making a survey of the proposed line from Lebanon to Bagnell.

Longwood, Fla.—E. W. Hencke informs the MANUFACTURERS' RECORD that no contracts have been made for building his proposed electric roads or for supplying material *

Montgomery, Ala.—W. F. Vandiver and others have been selected as a committee to secure subscriptions for the proposed Montgomery, Hayneville & Camden project. It is stated that most of the right of way has been secured. S. D. Bloch is one of the promoters.

Montgomery, Ala.—The Louisville & Nashville will relay its division between Montgomery and Mobile with 70-pound steel rails. About thirty miles of rail have already been purchased for this purpose.

New Orleans, La.—R. T. McDonald, M. J. Hart, Thomas A. Clayton and others have organized the Watkins Railroad Co. to acquire the franchise obtained by W. H. Watkins to build a belt line in Orleans, St. Bernard and Jefferson parishes.

Orange, Texas.—The Orange (Texas) Terminal Railroad Co. has been incorporated with a capital stock of \$100,000. The incorporators are G. Bedell Moore, W. H. Stark and J. H. Dawson.

San Antonio, Texas.—Hon. John Ireland, George G. Clifford and others have purchased a controlling interest in the San Antonio & Gulf Shore line, and Mr. Ireland will act as president. Mr. Clifford will be general manager. Construction towards Velasco is to be continued.

Tazewell, Va.—John Sweet, of Chicago, is promoting the proposed railroad into McDowell county, West Virginia. It will be twenty five miles long, and form a branch of the Norfolk & Western road. [Mr. Sweet is interested in the Mountain Lake Land Co.'s extensive plans in Virginia also—Ed.]

Tuscumbia, Ala.—It is stated that the Louisville & Nashville will reach Tuscumbia over the steam dummy road between Sheffield and Tuscumbia, which it has purchased.

Van Horne, Texas.—Sixteen miles of the Rio Grande Northern are ready for tracklaying. The San Carlos Coal Co., of Pittsburg, Pa., is building the road.

Winston, N. C.—The Marienbad Springs Railway Co. is about to solicit bids for constructing a standard-gage dummy line three miles in length, to be laid with 40-pound steel rails. W. E. Franklin and Thomas B. Crawford may be addressed.*

Electric Railways.

Annapolis, Md.—It is stated that about five miles of railroad, extending from Annapolis to Bay Ridge, may be rebuilt for use of trolley cars. Ne son Perin, of the City & Suburban Railway Co., at Baltimore, is interested.

Denison, Texas.—P. H. Tobin and A. F. Platter are among those interested in the electric line proposed to be built.

Houston, Texas.—The Houston Rapid Transit Co. has decided to extend its trolley system to the race-course in the suburbs. Address O. M. Carter.

Rossville, Tenn.—D. M. Stewart and others are interested in a plan to build an electric line from Rossville to the Chickamauga Park.

St. Louis, Mo.—The King's Highway Railway Co. has secured a charter to build an electric line along the thoroughfare of that name.

Street Railways.

Birmingham, Ala.—Varnell T. Brown has taken charge of the North Birmingham dummy line and will repair the road and rolling stock.

The Anniston (Ala.) Gas & Light Co. will use the General Electric Co.'s three W. P. thirty motors on sixteen feet closed cars, and will also put in an additional generator from the General Company, of New York.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Boiler and Engine.—The Tampa Novelty Manufacturing Co., Tampa, Fla., will buy engine, boiler, shafting, etc.

Boiler and Engine.—See "cotton mill."

Boiler and Engine.—W. D. Burgess, Liberty, N. C., wants to correspond with parties who have a good second-hand portable boiler and engine, fifteen to twenty horse-power, mounted on wheels, for sale (for saw-mill purposes), and must be a good one at a low price.

Boiler and Engine, or Gasoline Engine.—C. Grier, Dublin, Ga., wants to correspond with party who has a cheap pair of boat engines for stern-wheel river boat; 7x30-inch engines are as large as wanted; a twenty horse-power marine gasoline engine might answer. If steam engines are bought, will want boiler, return-tubular fire box of iron and light; machinery must be second-hand and cheap.

Brick Machinery.—H. B. Bowen, Easley, S. C., wants prices on mold brick machine, capacity from 15,000 to 25,000 per day.

Brick Machinery.—Hugh F. Sanders, Box 8, Cleburne, Texas, wants to correspond with manufacturers of dry press brick machinery.

Building Material.—The Saxe Gotha Mill Co., of Lexington, S. C., will want steel roofing, lime, cement and all material for cotton-mill building. Address in care W. P. Roof, Lexington, S. C.

Building Materials.—J. P. Heard, Vienna, Ga., will buy brick, stone, window sills, plate-glass front, iron columns, roofing, etc.

Can Machinery.—See "machine tools."

Canning factory Machinery and Supplies.—The Walhalla Canning Co., Walhalla, S. C., G. W. Pratt, president, wants outfit for cannery, cans, labels, boxes, etc.

Canning Machinery.—J. R. Culp, Heardmont, Ga., wants prices on canning machinery.

Canning Machinery.—J. S. Davidson, Edwards, Miss., wants prices on canning machinery.

Compressors.—X. V. Z., care of MANUFACTURERS' RECORD, Baltimore, Md., wants to correspond with builders and manufacturers of cotton compressors.

Cotton Mill.—The Collier Cotton Mill will want complete equipment for a \$100,000 cotton mill. Address T. P. McDill, secretary, Hickory Grove, S. C.

Cotton Mill.—The South Side Manufacturing Co., Salem, N. C., will buy equipment for 3000-spindle mill, including 150 horse-power condensing engine, 200 horse-power boiler, feed pumps, etc.; H. E. Fries, president.

Cotton-mill Machinery.—The Saxe-Gotha Mill Co., of Lexington, S. C., will buy 3000 spindles and 220 looms at once. Address in care W. P. Roof, Lexington, S. C.

Dry-kiln.—J. Elwood Cox, High Point, N. C., expects to be in the market for a first-class dry-kiln with an average capacity of 10,000 hickory spoke billets per day, with a guarantee that the best second-growth hickory will not be cracked while drying therein.

Engine.—Traynham & Ray, 90 Decatur street, Atlanta, Ga., will buy engine, 100 to 150 horse-power, new or second-hand.

Engine.—The city of Water Valley, Ga., wants to buy a good second-hand Corliss engine of 140 to 175 horse-power; specifications asked for. Address G. D. Able, mayor.

Engine.—N. J. Badu, Liano, Texas, will need an engine.

Engine.—Park & Brown, Boydton, Va., want a six or eight horse power engine, second hand.

Engine Lathe.—The Diamond Dust Soap Powder Co., Savannah, Ga., wants an engine lathe.

Fan.—The Gastonia Coffin Co., Gastonia, N. C., will buy a shaving fan.

Fire Apparatus.—Wanted, a light chemical engine on wheels. Address H. H. Canfield, St. Augustine, Fla.

Flour-mill Machinery.—S. N. Wilson, Russell, N. C., wants two stand rollers, etc.

Grinding Mill.—The Diamond Dust Soap Powder Co., Savannah, Ga., wants a grinding mill.

Heating Apparatus.—The new courthouse for Cadiz, Ky., will be 64x50 feet, seven rooms below

with 12-foot ceiling, one room above with 15-foot ceiling. The fiscal court of the county has directed the commissioners to contract for suitable hot-air furnace or furnaces to heat said building, and the commissioners meet on May 8 at 10 o'clock to consider bids, examine plans, systems, etc.; bids and correspondence solicited; G. B. Bingham, chairman; Jno. D. Shaw, secretary.

Hoisting Engine.—George O. Tenney, Chattanooga, Tenn., wants to purchase a second hand double-drum hoisting engine, with or without boiler; must be in good condition and guaranteed such.

Hoop Machinery.—Stone & Grier, Dublin, Ga., would like to buy a set of second hand coil hoop machinery.

Hoop and Stave Machinery.—R. W. Harris, Lauderdale, Miss., wants to correspond with manufacturers of hoop and stave machinery.

Hydraulic Press.—Wm. A. Cather, Bluefield, W. Va., wants a hydraulic wheel press sixty or seventy-five tons capacity, new or second-hand.

Locomotive.—Geo. A. Jewell, Gilmore, Ark., is in want of a small second-hand train engine from four to six horse power to run on wooden rail tramroad, to use in connection with saw mill.

Machine Tools.—The Connell Novelty Manufacturing Co., Tampa, Fla., will buy engine lathes, drill presses, grinding machinery, planers, punch presses, etc.

Machine Tools.—Wanted, one hollow-spindle 32-inch-swing lathe, one hollow-spindle 12-inch-swing lathe, one Universal milling machine, one 30-inch-swing drill press; second-hand tools preferred; must be in prime condition and accurate. Address A. B. C. 378, off. e. of the Sun, Baltimore, Md.

Machine Tools, etc.—Martin & McKown, Wheeling, W. Va., will need shortly squaring shears, folding machine, burring machines, mandrel, soldering cappers, solder, rivets, wire rods for forming, etc., to be used in manufacturing oil-cans.

Medicine-factory Supplies.—The Oriental Manufacturing Co., Baltimore, Md., will need pasteboard boxes, mailing envelopes, bottles, drugs and general supplies.

Molding Machine.—The Gastonia Coffin Co., Gastonia, N. C., will buy a molding machine.

Nickle-plating Plant.—The Connell Novelty Manufacturing Co., Tampa, Fla., will buy a nickle plating plant.

Paper-box Machinery.—The Diamond Dust Soap Powder Co., Savannah, Ga., wants paper box machinery.

Patterns.—Wanted, stove hollowware patterns, such as straight, round-bottom pots, Nos. 6, 7, 8 and 9; griddles, Nos. 6, 7, 8 and 9; skillets and lids from eight to sixteen inches; oven and lids from eight to sixteen inches; also patterns for box stove heaters, wood burners, about three sizes; second-hand patterns, if in good order, will do. Address J. S. Rice, financial agent of Texas State penitentiary Rusk, Texas.

Pipe.—The commissioners of the Lower City Park of New Orleans, La., want prices on eight-five feet to 10 inch cast iron pipe, about three-quarters inch thick, either flanged or bell-mouthed, new or second-hand; name price freight paid to New Orleans; terms cash.

Planer and Matcher.—Wanted, a second-hand planer and matcher; must be in first class condition and cheap; also a heavy planer that will dress and match flaring and work timbers 6x16 inches. Address the Alabama & Georgia Lumber Co., M. Montgomery, Ala.

Planing Mill.—B. P. Thornhill & Co., Lynchburg, Va., want machinery for manufacturing sash, doors and blinds.

Planing-mill Machinery.—Traynham & Ray, 90 Decatur street, Atlanta, Ga., will buy full outfit of sash, door and blind machinery.

Power Plant.—Conkle & Hubbard, Secretary, Md., want a power plant (other than steam) for shirt factory, operating about eighty machines; give particulars.

Punch and Metal Break.—The Dow Wire Works Co., Louisville, Ky., wants a second-hand break, about six feet two inches between housings, strong enough for breaking sheet iron No. 10 to and 12; punch break for hand or belt-power; also want punch with throat eighteen to twenty-four inches, heavy enough to punch a three eighths-inch hole through one-half-inch iron.

Quarry Machinery.—N. J. Badu, Liano, Texas, will need saws, polishes, etc., for quarry.

Rails.—About 350 tons of 56 pound girder rails and 1300 tons of 48 pound T rails will be used for proposed electric railway. Address E. W. Hencke, civil engineer, Longwood, Fla.

Rails.—The Pen Argyl Iron Works, Pen Argyl, Pa., wants steel or iron rails good for relaying of about twenty pounds to the yard.

Railway Equipments and Supplies.—The Marienbad Springs Railroad Co., Winston, N. C., wants bids on standard wide-gage 30 or 40-pound steel rails, T, with splice joints, bolts and spikes for same; two coaches with a seating capacity of forty to fifty passengers each; one light eight-wheel flat; dummy with a capacity of not less

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than two coaches and 200 passengers to be carried successfully over our road. Our heaviest grade will be 9 per cent. for 600 feet, and no other grade will exceed 7 per cent. There will be one sharp curve with a 50-foot radius. Coal will be used as fuel. If a good bargain, will not object to second-hand material.

Railway Supplies.—The Anniston Gas & Light Co., Anniston, Ala., will purchase two trucks for W. P. thirty motors on 16 foot closed cars.

Roofing.—The Gastonia Coffin Co., Gastonia, N. C., will buy roofing and steel siding.

Roofing.—Traynham & Ray, 90 Decatur street, Atlanta, Ga., will buy corrugated and galvanized iron roofing.

Sewers.—Sealed proposals will be received until April 25 for constructing eighteen miles of sewers. Address A. D. Shotwell or Edwin Mit. hell, engineer, Manchester, Va.

Sewing Machines.—Conkle & Hubbard Secretary, Md., will buy sewing machines for shirt manufacturing.

Shoe Machinery.—Park & Brown, Boydton, Va., want a press with table 3x36 inches, open two and a-half or three feet, 100-ton pressure, second-hand; also knuckle giant press.

Soap Machinery.—W. H. Lytle, Jr., Jacksonville, Fla., wants to correspond with manufacturers of soap machinery.

Straw Braid.—The National Straw Hat Works, Atlanta, Ga., is in the market for straw braid.

Telephone Equipment.—The Capitol City Telephone Co., M. B. Rice, superintendent, Tallahassee, Fla., wants bids on forty telephones and apparatus for exchange of fifty subscribers.

Water Works.—Scranton, Miss., will want proposals for water works. S. R. Thompson and others are on the board.

Wind-mill.—A. N. Wood, Gaffney, S. C., wants a wind mill.

TRADE NOTES.

THE Bickford Drill & Tool Co., Cincinnati, Ohio, is bringing out and has now ready for the market a new radial drill called its No. 6 machine, for which it claims great superiority. It is an entirely new departure from the ordinary run of small radial drills, and possesses features which will recommend it very highly; for instance, a new designed table the full length of the bed-plate, an automatic stop for the spindle, and a new arrangement for throwing in and out the back gears. This machine will be illustrated in these columns in the near future. The company has also issued a book entitled "A Few Results," showing testimonials from the largest and leading manufacturers in the country about its machines.

An invention which is attracting much interest throughout the country is a device for changing the speed of iron tools, invented by Mr. Frank H. Crafts, general manager Buffalo Woodworking Machinery Co., of Buffalo, N. Y. Mr. Crafts has been giving his invention thorough tests in such works as the Williams Cramp & Sons Shipbuilding & Engine Co., of Philadelphia; the Pond Machine & Tool Co., at Plainfield, N. J., while the Walker Manufacturing Co., of Cleveland, Ohio, will place one on a 72-inch Gray & Co. planer. The appreciation of such concerns speaks well for the future of this invention, and the indications are that it will be in great demand throughout the country. A company is now being formed in Buffalo to manufacture and place it upon the market.

The pumps for the new water works at Canandaigua, N. Y., will be operated by means of power electrically transmitted on the three-phase system of the General Electric Co., which concern will supply all the electrical apparatus. The power house will contain one 100 K. W. three-phase generator, delivering current at 2080 volts; this will be driven by a steam engine. The current will be transmitted to the pumping station 18,000 feet distant, on the shores of Lake Canandaigua, 3500 feet from reservoir. The pumping house will be occupied by two 1,000,000-gallon pumps, directly geared to 100 horse-power induction motors, wound for 2080 volts and revolving at 600 revolutions. The duplication of the pumping system has been determined upon in order that the work may be effected continually, even should one pumping equipment break down. An automatic signal-alarm will indicate at the power-house when the reservoir is full.

SPRINGFIELD, MINN., has a new electric-light and water-works system of which the citizens are very proud. The controlling policy in planning this system was to make a model one, and utilize the most approved ideas, as well as machinery of equal merit. The plant is operated by a Hick's compound gasoline engine, made by the Hicks Gas Engine Co., of Cleveland, Ohio. The evenness, economy and reliability with which it is doing its work impels the local paper to call it "the engine of the future." The electrical apparatus was furnished by the Fort Wayne Electric Co., of Fort Wayne, Ind., and includes two thirty-five arc light dynamos. Referring to the system, the Advance, of Springfield, says: "The

village is to be congratulated upon having received more than they contracted for, and they can justly point with pride to the finest electric-lighting plant in any city of its size in the world. We believe that for elegance of design and solidity of construction it cannot be equaled anywhere."

In order to meet its steadily-increasing trade, the Gates Iron Works, of Chicago, has found it necessary to build a new plant fronting on Elston avenue, Bloomingdale road, Redfield and Stein streets. The plant is one of the most complete of its kind in this country, and includes a machine shop, seventy-five feet wide and 350 feet in length, built of steel and brick, which contains, a long other powerful machinery, a 25-ton electric crane running the entire length of the shop. Some of the celebrated Niles boring mills are among the tools, while the apparatus is operated by six electric motors. The offices of the company fronting on Elston avenue and Bloomingdale road are handsomely finished and fitted with large vaults to protect the books, drawings and other property of the company. The Gates Iron Works has its own electric-power plant, driven by a large Corliss engine of its own make. The works are well worth examination by all interested in machinery. The new office address of this company after May 1 will be No. 690 Elston avenue.

THE CORBETT MILL & MACHINE CO., of 487 Missouri avenue, Washington, D. C., has secured a large contract for Miller, Robins & Co., of the same city, which includes an engine and boiler, also a complete line of machinery necessary for sawing and splitting kindling wood. In putting in this plant, the Eagle lubricators and Penberthy oil-cups, also the safety crank-pin oiler are used. This plant is located at 14th and C streets, Washington, and any one interested in mechanical devices would do well to examine it. Among other work which the Corbett Company have contracted for is a fifty horse-power McNaull water-tube boiler and a forty horse-power engine for B. C. Garrett, of Herndon, Va. They are also at work on the foundation for a McNaull water-tube boiler for Norris, Peters & Co., of Washington. Among other work which they will complete in the near future is an order for a twenty horse-power engine and twenty-five horse-power boiler for Falls Church, Va.; also a corn roller mill complete, to be erected in Danville, Va.

THE ST. LOUIS FOUNDRY SUPPLY CO., of Pine street, St. Louis, announces to the trade that Mr. E. L. Fitzmorris, of the J. D. Smith Co., has associated himself with it. It is hardly necessary to state that the St. Louis Foundry Supply Co. is one of the best known establishments in the country in its line. Under Mr. Fitzmorris's personal direction it is manufacturing a full line of the best foundry facings and blackings, also plumbagoes, and all kinds of tools, such as shovels, lathes, soft, hard and steel brushes, bellows, mallets, etc. The company is prepared to furnish anything and everything needed in the foundry, except coke and iron, and on account of its large trade can sell goods at surprisingly low prices. Its lines of foundry facings and blackings have no superior, and since Mr. Fitzmorris is an expert in these specialties, his association with the concern will tend to increase the reputation of its goods. Some of its specialties are sea coal in sacks and barrels, heavy stove-plate and machine facings, mineral and excelsior facings, silver lead, core wash, core compounds, charcoal and soapstone facings.

HERE are a few straws that show how things are going with at least one firm. Good goods tell John T. Pensinger, general Southeastern agent for Aug. Wolf & Co., of Chambersburg, Pa., has contracted with F. Engleman, of Union Bridge, Md., for remodeling his 75 barrel flouring mill. John O. Estenson of Cyrus, Minn., has placed contract with Wolf & Co. for building him a complete 60-barrel "Wolf system" flouring mill. William Marcum & Sons, of Sulphur Well, Ky., have contracted with Wolf & Co. for a 30-barrel roller system flouring mill, through their general Southern agent, Charles Beatley. John T. Pensinger, general Southeastern representative for Wolf & Co., Chambersburg, Pa., has been awarded contract for the 35-barrel flour mill to be built at Shady Grove, Va., for R. W. & S. T. Pedigo. Wm. F. Weirick of Charleston, W. Va., will put in a 35-barrel flour mill and has contracted for same with John T. Pensinger, general Southeastern agent for Wolf & Co. A 25 barrel flouring mill is being built at Houston, Del., by John B. Wilson; contract for same has been placed with Wolf & Co. through their general Atlantic agent, M. N. Hartz.

THE merit of the gas and gasoline engines made by the Weber Gas & Gasoline Engine Co., of 405 Southwest Boulevard, Kansas City, Mo., is well known to its many patrons. Among other letters recently received by this firm is one from Messrs. H. C. Price & Bro., of Syracuse, Kans., in which they state that they have thoroughly tested a No. 4 engine purchased of the Weber Company last September, and find that it can raise 200,000 gallons of water per hour to a height of seven feet, using a Menge pump, which supply can irrigate from twelve to fifteen acres of land per day. The quantity of fuel necessary is but

one gallon of gasoline per hour, costing just thirteen cents. This plant has attracted much attention, and those who have seen it in operation highly endorse the engine. In closing their letter Messrs. Price & Bro. say: "When it comes to water we are independent of everyone now, and it would be impossible for us to say too much for the Weber, and if you want to use a testimonial from us you have our full permission to do so. You cannot exaggerate the work of the Weber." The Weber Gas & Gasoline Engine Co. makes a specialty of irrigation pumping plants, and can furnish all the necessary mechanism and contract for pumping plants complete in every detail.

THE REMINGTON MACHINE CO., of Wilmington, Del., continues to supply its well and widely known ice and refrigerating machinery throughout the United States. Some recent orders have been from the Texas Lake Ice & Cold Storage Co., New Westminster, B. C., for a 10 ton ice plant; Mr. John Bier, Baltimore, Md., three-ton refrigerating plant; Eutaw House, Baltimore, Md., three-ton refrigerating plant; Mercantile Club, Philadelphia, Pa., four-ton refrigerating plant; Hotel Raleigh, Washington, D. C., three-ton refrigerating plant; North Packing & Provision Co., Boston, Mass., four-ton refrigerating plant; Mr. A. F. Hoenes, Baltimore, Md., four-ton refrigerating plant; Passaic Beef Co., Passaic, N. J., 10-ton refrigerating plant; Messrs. Mutz & Cassidy, Ferris, Texas, three-ton ice plant; Messrs. Nelson Morris & Co., Washington, D. C., 10-ton refrigerating plant; Messrs. L. W. Hopkins & Co., Baltimore, Md., three-ton refrigerating plant; Messrs. G. F. Martin & Co., Little Rock, Ark., four-ton refrigerating plant; Messrs. William Curry's Sons, Key West, Fla., 15-ton ice plant; Johns Hopkins University, Baltimore, Md., three-ton refrigerating plant; Mr. Chris Rammel, Washington, D. C., three-ton refrigerating plant; New York Condensed Milk Co. as follows: Carpentersville, Ill., 18-ton refrigerating plant; B. Ewster, N. Y., 18-ton refrigerating plant; Walden, N. Y., 18-ton refrigerating plant; Wassaic, N. Y., 18-ton refrigerating plant; Deposit, N. Y., six-ton refrigerating plant.

We would call the attention of our readers to the useful line of goods manufactured by the National Water-Proof Fibre Co., of 36 South street, New York, whose ad. appears in this issue. Their specialty is the manufacture of water-proof and mildew-proof cotton duck, and their usefulness and durability is attested by the recommendation of some large and well-known firms in New York and other places. Their goods are used for a variety of purposes. They supply railroads with water proof pavilions for covering goods on docks, depots and all places exposed to rain. The great advantage of these goods is that they will not heat or stick together, will not mildew and are absolutely water proof. The water-proof cotton duck in the roll can be used for roofs of houses and will absorb very little paint, being already thoroughly filled. It is suitable for ice-houses, ice-wagons and a thousand and one other purposes. Their mildew-proof treatment for awning stripes sets the colors so that they do not fade, and on tent canvas is particularly good. Tents made of either the water-proof or mildew-proof duck shed water, and the life of the goods considerably extended. Many of our readers have doubtless experienced the discomfort of living in a tent that will when there is a heavy shower leak like a sieve, causing great inconvenience and sometimes loss, converting the interior of the tent into a damp, unhealthy place to stay in. Merchants and manufacturers who have drays and wagons need water-proof covering to protect their goods when in transit. This company has lately executed several large contracts for water proof bags, used for the purpose of raising sunken vessels. These bags are placed in the hold of sunken ships, compressed air is pumped into them by air compressors, and as the bags fill with air and displace the water is displaced and the vessel comes to the surface. They also supply hay-caps and stack-covers of light water proof material, and a special line of goods used to protect plants against frost, called plant bed cloth. Tobacco-growers, gardeners, florists and horticulturists use this cloth in place of glass. Any readers who can use goods of the nature manufactured by this concern would serve their own interests by communicating with them and getting full particulars.

\$1.25 to Washington and Return.

The Baltimore & Ohio Railroad Co. will sell excursion tickets from Baltimore to Washington for all trains Saturday, April 13, and Sunday, April 14, at \$1.25 for the round trip, valid for return passage until following day.

Saturday and Sunday Excursions to Washington via Pennsylvania Railroad.

On April 20 and 21 the Pennsylvania Railroad Co. will sell excursion tickets from Baltimore to Washington and return at the rate of \$1.25 for the round trip. Tickets valid in each direction on all regular trains, and good for return passage until Monday, April 22, inclusive.

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An Attractive Southern Property.

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